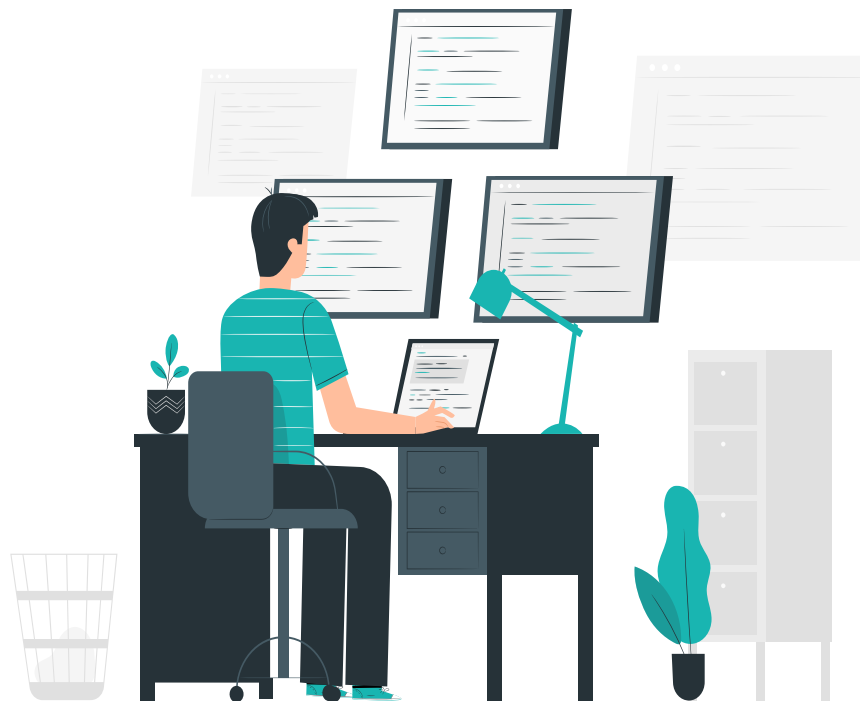


# Mopar Dealer Audit Tool

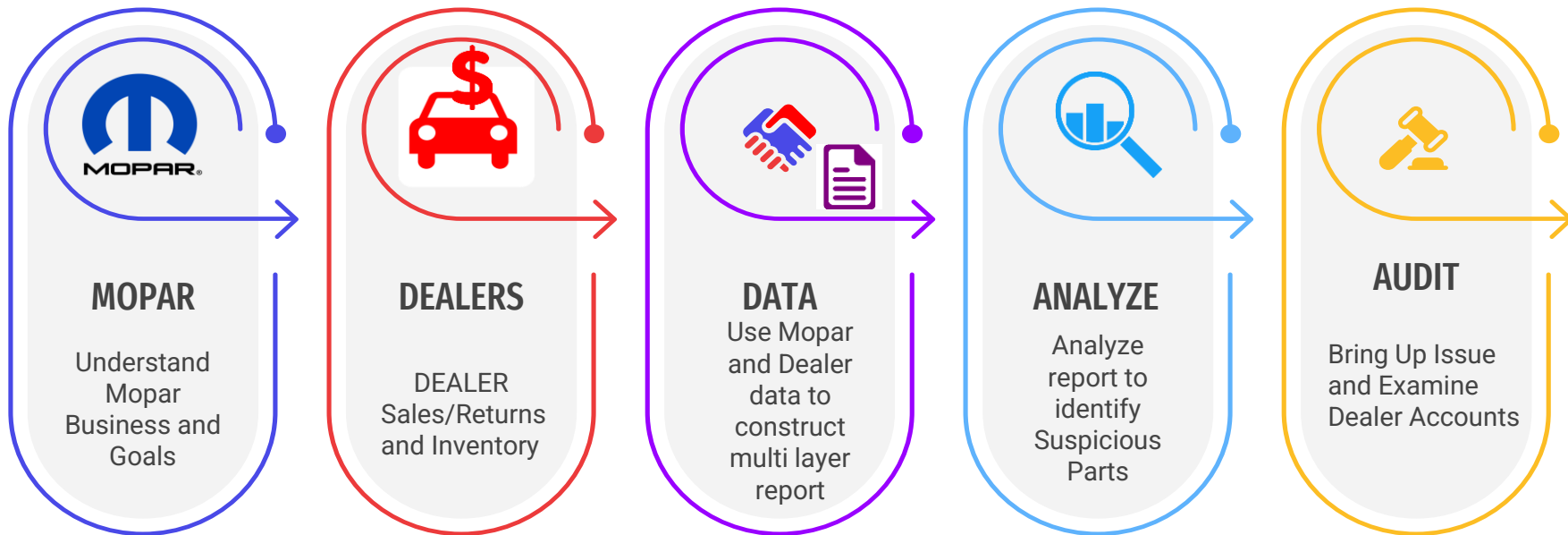
Josue Nunez



## UNDERSTANDING THE PROBLEM



**Brian Kalinowski: "This has been an "age old" problem that we haven't been able to easily solve/automate for 20 years"**





**MOPAR®**

At your service



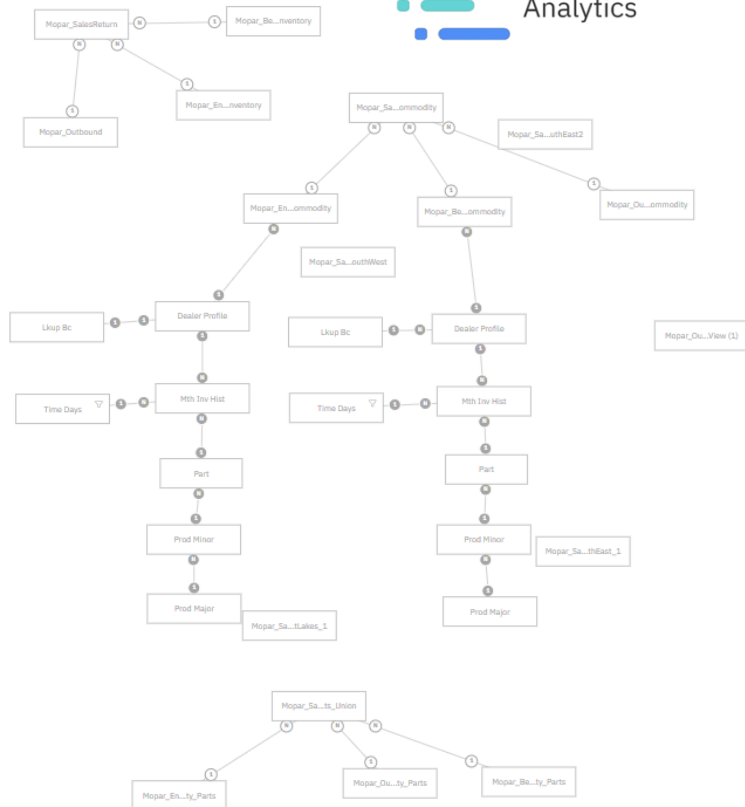
- **Supplier of parts for Chrysler, Dodge, Jeep, and Ram**
- **Offer Maintenance and Repair Services**
- **Part Warranty Options**
- **Roadside Assistance**



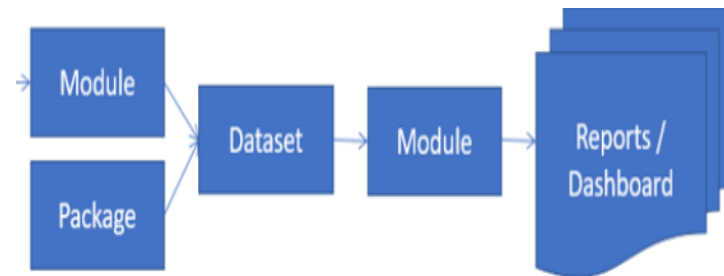
## **FILE PATH TO AUDIT TOOL REPORTS IN COGNOS**

**Team Content: After Sales -> Mopar -> Mopar Sales and Marketing -> Mopar Sales and Marketing Shared Reports -> Intern\_Dealer Audit -> Reports**

Grid Relationships Custom tables



1. Mopar Sales/Returns 2. Mopar Outbound 3. Beginning Inventory and Ending Inventory



# Report Levels



B	C	D
Business Center - US	Dealer Code - US	Dealer Name
Southwest	38495	BURNS MOTORS, LTD
Northeast	37058	R I SURESKY & SON INC
Denver	38356	PERKINS MOTOR COMPANY, INC.
Great Lakes	39712	SWOPE CHRYSLER DODGE JEEP
Northeast	39075	BUHLER & BITTER INC
Denver	36315	NERSON CHRYSLER CENTER, INC.
Denver	37271	BERNARD'S NORTHTOWN INC
Midwest	36277	LARRY ROESCH CHRYSLER-JEEP-DODGE
Southwest	38108	BLACKBURN MOTOR CO INC
Great Lakes	36464	TOM O'BRIEN CHRYSLER JEEP DODGE
Northeast	37002	FITZPATRICKS INC
Denver	38999	ADAMSON MOTORS INC
Midwest	38308	SHIMKAT MOTOR CO
California	36952	S J DENHAM CHRYSLER JEEP FIAT
Northeast	36100	LEE CHRYSLER JEEP DODGE

## LEVEL 1

Report at Dealer  
Level

Major Code Description
MAGNETI MARELLI
MOPAR PERFORMANCE
SPRINTER PARTS
GLASS
ELECTRONICS
REMANUFACTURED
CHEMICALS
EXTERIOR PARTS
SHEET METAL
RADIOS
GENERAL ACCESSORIES
INTERIOR PARTS
COOLING
MOTOR OIL & LUBE
ELECTRICAL ENGINE

## LEVEL 2

Report at the Part  
Commodity level

Major Code Description	Part Number
REMANUFACTURED	R8259595AB
REMANUFACTURED	R8277271AA
REMANUFACTURED	R8446898AB
REMANUFACTURED	R8148949AF
REMANUFACTURED	R8259594AB
REMANUFACTURED	R8148945AK
REMANUFACTURED	R8260786AB
REMANUFACTURED	R8156209AG
REMANUFACTURED	R8009099AD
REMANUFACTURED	R8010997AE
REMANUFACTURED	RL292530AC
REMANUFACTURED	R8148949AG
REMANUFACTURED	R8000840AI
REMANUFACTURED	R8277272AA
REMANUFACTURED	RL314486AA

## LEVEL 3

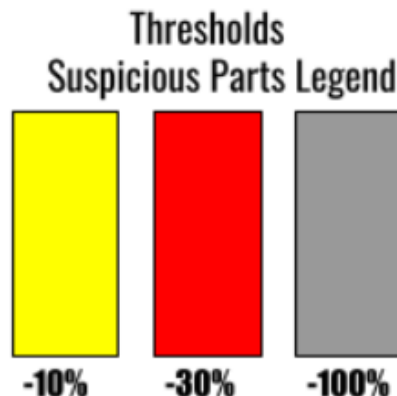
Report at the  
Individual Parts  
Level

## DELTA Calculation to identify suspicious parts

$$[\text{Gross Sales Amount(YTD)}] - ([\text{Gross Returns Amount (YTD)}] + [\text{Beginning Inventory(Snapshot on January of current year)}] - [\text{Ending Inventory (Most Recent Snapshot)}] + [\text{Mopar Unit Sale Price(YTD)}])$$

Delta	Delta / Gross Sales Amount
-22,113.75	-8.130%
-27,524.7	-134%
-2,979.7	-116%
-65,055.8	-86%
-1,192.8	-57%
-240,589.95	-44%
-7,504.9	-39%
-108,509.5	-30%
-506,826.75	-29%
-8,416.25	-26%
-33,627.15	-26%
-40,222.45	-26%
-34,113.15	-25%
-33,209.84	-24%
-20,097.4	-22%

Data refreshes daily at 6 am



## Data Items in Reports

Business Center - US

Dealer Code - US

Dealer Name - US

Part Number **(Level 3)**

Product Portfolio Description **(L2 & L3)**

Major Part Commodity **(L2 & L3)**

Gross Sales Amount

Gross Returns Amount

Mopar Unit Sale Price Extended (\$ and Qty)

Beginning Inventory (\$ and Qty)

Ending Inventory (\$ and Qty)

Delta [Purchases - (Sales + Returns + Change in Inventory)]

Delta/Gross Sale



## Dealer Level 1

### SEARCH AND SELECT DEALER CODE

Keywords:

Input keywords here

☐ Select all

- ☒ 57081
- ☒ 57408
- ☒ 58424
- ☒ 59643
- ☒ 57672
- ☒ 52979
- ☒ 57865

Starts with any of these keywords

☒ Case Insensitive

Choices:

- 57081
- 57408
- 58424
- 59643
- 57672
- 52979
- 57865
- 56821
- 54655
- 58525
- 59682
- 52664

Select all Deselect all

## Part Commodity LEVEL 2 AND PARTS LEVEL 3

### SELECT DEALER CODE

Keywords:

Input keywords here

☐ Select all

- ☒ 59350

Starts with any of these keywords

☒ Case Insensitive

Choices:

- 59350

Select all Deselect all

### SELECT PART COMMODITY

FILTERS

- GLASS
- MOTOR OIL & LUBE
- REMANUFACTURED
- SHOCKS/STRUTS & PROPS
- TIRES
- TRUCK ACCESSORIES
- UNASSIGNED
- ELECTRONICS
- BATTERY
- CHEMICALS

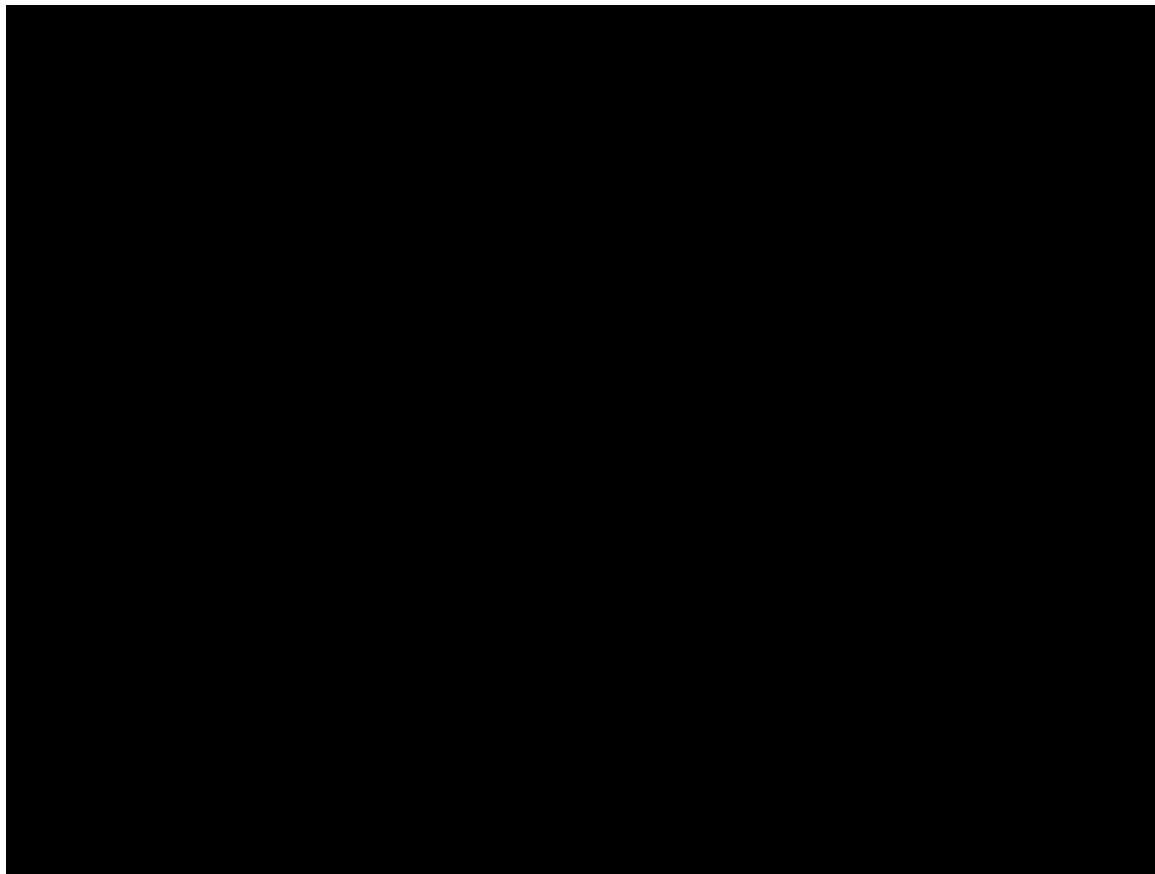
Select all Deselect all

### SELECT PPT

- PERFORMANCE
- ACCESSORIES
- MAINTENANCE
- CAMPAIGN/OTHER
- SPRINTER
- GEN/PT/REMAN

Select all Deselect all

## Mopar Dealer Audit Tool DEMO



## VALUE TO THE COMPANY

1

### Compare data

Helps relate dealer selling behavior and compare to what its buying from Mopar

2

### Inventory Management

Helps inventory management by comparing sales and stock.

3

### Identify Suspicious Parts

Ability to drill down through levels of report to be able to identify Suspicious data.

4

### Capital

5

### Cost

6

### Revenue

## Future of Mopar Dealer Audit Tool

- Transition to Mopar Support Team
- Identity and Access Management (IAM)

### Future ideas and Opportunities

- Variant Report
- Writing a script using python to alert Dealerships via email
- Create Data Visualizations using Dashboard and Exploration functionality in Cognos 11.1.7

# Validation

Use sum of Delta Data item when exporting to Excel to compare and validate to previous level Report expected data.

M	N	
Inventory (Most Recent Snapshot)Jun 10, 2021	Delta	Delta
0	-25,080	
0	-10,875	
0	-8,030	
0	-7,560	
0	-6,970	
0	-6,440	
0	-6,380	
0	-6,145	
0	-6,030	
0	-5,990	
0	-5,870	
0	-5,590	
0	-5,370	
0	-5,290	
0	-5,120	
0	-4,720	
0	-4,540	

ge: -623.3356725 Count: 343 Sum: -213180.8

## Current Issues

- All data sets in data module relationships are full outer join to be able to make sure all data is present when there is mis matching data as well coalescing all data items in report so that it can pull data items from different data sets in case it's missing data in a particular dataset.
- That being said PPT Code & Description is only available in one dataset at the moment for each report level. So I can't coalesce to anything. PPT Code in report level 3 causes some validation issues due to some data rows missing PPT Code Description and code because of Dealer data input not including it. Mopar needs PPT Code in Report 2 and 3 as they requested it.
- Outbound Sales total sum in Report 3 is slightly off in expected value when comparing to Report Level 2 expected outbound sum.
- Jobs sometimes isn't refreshing data everyday at 6 am.

Delta

	C	D	E	F	
	Dealer Code - US	Dealer Name - US	PPT Code Description	Product Portfolio Team (PPT) Code	Major
1	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
2	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
3	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
4	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
5	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
6	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
7	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
8	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
9	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
10	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
11	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
12	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
13	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
14	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
15	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
16	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
17	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
18	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
19	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
20	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
21	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
22	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
23	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
24	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
25	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
26	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
27	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
28	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
29	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
30	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
31	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
32	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
33	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
34	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
35	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
36	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
37	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
38	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
39	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
40	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
41	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
42	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
43	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
44	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
45	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
46	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
47	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
48	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
49	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
50	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
51	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
52	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
53	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
54	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
55	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
56	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
57	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
58	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
59	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
60	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
61	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
62	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
63	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
64	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
65	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
66	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
67	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
68	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
69	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
70	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
71	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
72	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
73	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
74	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
75	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
76	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
77	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
78	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
79	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
80	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
81	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
82	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
83	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
84	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
85	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
86	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
87	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
88	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
89	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
90	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
91	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
92	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
93	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
94	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
95	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
96	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
97	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
98	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
99	24237	AUTONATION CHRYSLER JEEP WEST			REMAN
100	24237	AUTONATION CHRYSLER JEEP WEST			REMAN

MOPAR business partner requested to put together a Dealer Audit Tool that combines information from MOPAR Sales (what MOPAR sold to dealers), Outbound Sales (what dealers sold to end customers) and Dealer Inventory (what dealers store for their inventory).

The goal is to be able to get the high level data report at the dealer level and be able to drill down to identify the suspicious parts details.

That has been an "age old" problem that business hasn't been able to easily solve/automate for 20 years.

This is a multi-layer assignment that enables the next layer once the previous is completed.

1. Build the data foundation (data module/data sets) based on existing packages data (MOPAR Sales and M5300) considering YTD period.
2. Build a high level report that will capture the data at the dealer –Dealer Audit Report.
3. Build the foundation to obtain the data as described in item 1 at the dealer/part commodity level (possible to break down the datasets at Business center for manageable size of the dataset).
4. Build a drill-through report to at dealer/part commodity level - Dealer Audit Report with Part Commodity.
5. Build the foundation (if possible that will include the suspicious parts only)
6. Build a drill-through report that will capture the data at the part level.
7. Use the exploration feature to explore the data module and build the visualizations in the dashboard (by using the pin library).
8. Build the story (for the final presentation) based on the dashboards created in item 7 using the Story feature.