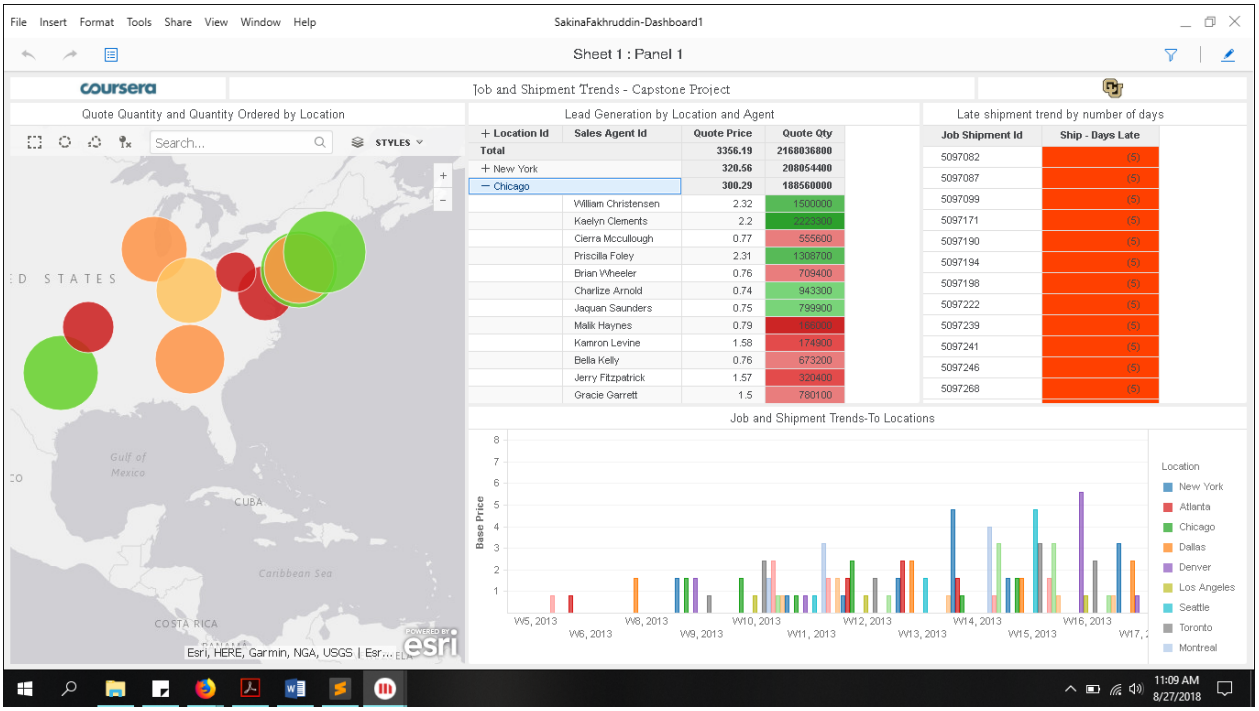
Capstone Project Summary

Analysis

Dashboard 1 - Job and Shipment trends



How much revenue does a company generate from its job bookings?

Revenue can be calculated by multiplying the Quote price * Quote quantity. We can easily do that from Lead Generation visualization.

How many jobs does each sales agent book?

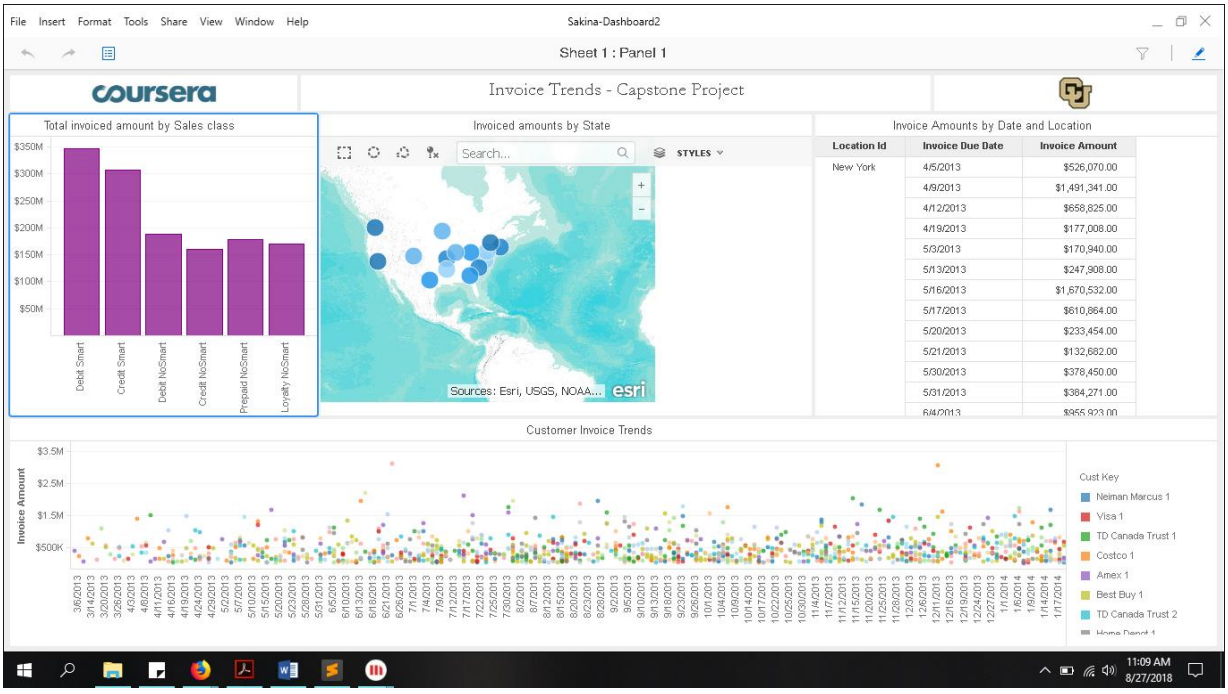
Sales Agent Id	Location Id	Quote Price	Quote Qty
William Christensen	New York	1.5	860100
	Chicago	2.32	1500000
	Dallas	0.77	562900
	Los Angeles	2.2	2164900
	Seattle	1.54	1058300
Kaelyn Clements	New York	1.58	338100
	Chicago	2.2	2223300
	Dallas	1.5	756200
	Denver	2.97	1836400
	Los Angeles	0.73	1207400
	Seattle	0.77	594200
	Montreal	0.74	960800
	Vancouver	1.52	660400
	London	0.79	157600
Alia Hart	Dallas	1.5	1772900
	Montreal	0.78	406900
	Birmingham	1.47	2039700

Our second visualization can be changed easily to the one above from Lead Generation by Location and Agent. We can see the different jobs booked by each agent in different locations. Avg is 5-6

How many jobs have not yet shipped or have only partially shipped?

Not Yet Shipped == Those whose last ship date is not available.
Partially Shipped = Whose shipments have started and are in the data.

Dashboard 2 – Invoice trends



Which sales class generate the highest invoice amounts?

Debit Smart

How many invoices are generated for a time period?

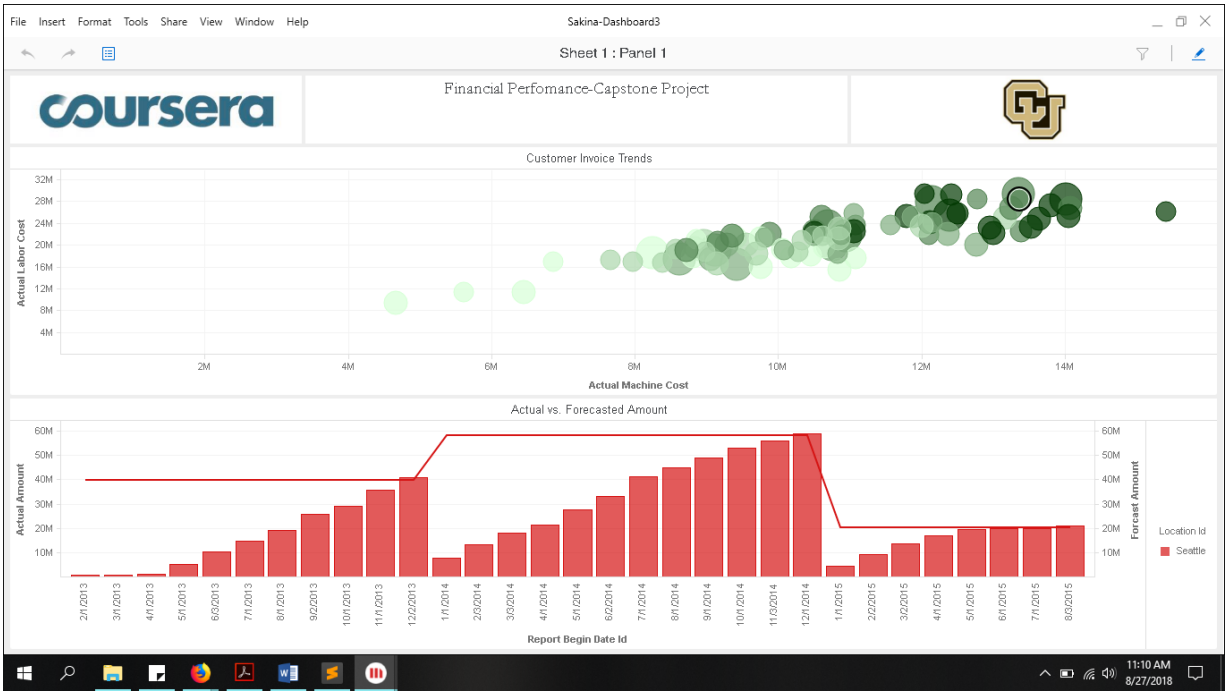
Invoice Due Date	Location Id	Invoice Amount
2/20/2013	Seattle	$379,002.00
3/6/2013	Chicago	$206,976.00
3/12/2013	Dallas	$43,680.00
3/13/2013	Dallas	$766,384.00
3/14/2013	Birmingham	$601,620.00
3/15/2013	Toronto	$102,720.00
3/19/2013	Vancouver	$349,800.00
	Birmingham	$724,830.00
3/20/2013	Dallas	$494,775.00
	Seattle	$538,128.00
3/22/2013	Montreal	$261,415.00
3/25/2013	Toronto	$116,560.00
3/26/2013	Dallas	$458,335.00
	Denver	$477,566.00
	Montreal	$200,260.00
3/27/2013	Chicago	$81,120.00
3/29/2013	Toronto	$140,400.00
4/3/2013	Los Angeles	$508,445.00
	Toronto	$265,356.00
4/4/2013	Chicago	$1,385,916.00
4/5/2013	New York	$526,070.00
	Vancouver	$334,050.00

Above visualization can be easily generated from the grid table showing amounts by location and date where for each date we can see the number of invoices. The date column can be drilled up to keep track of number of invoice by time.

What is the total amount invoiced for a time period?

Using the same above visualization for previous question, for each date or time, we can sum up the invoice amounts.

Dashboard 3 - Financial Performance



Determine the location and the machine which have the highest overall machine and labor cost. Also determine which location has the lowest budget overhead cost.

Highest Overall Actual Machine + Labor Cost = Seattle
Lowest Budget Overhead Cost = Atlanta $6838820.8

Which location is seen to have higher forecast amount in comparison to the actual amount on the basis of time period?

Vancouver ($655,499,035) difference that is max between forecasted amount and Actual Amount.

Learnings

By making all these visualizations we can find the target regions that are facing problem, keep track of sales agent performance, find the regions which are performing bad, find the region with maximum amount or revenue generated. This helps us to make some very particular decisions based on the data such as where to spend more and where to cut spending.

There are three main learnings from the project:

- How to clean data for it to be usable for further analysis
- What particular questions to ask to ensure that maximum amount of benefit. Sometimes the customer/end user does not know what he/she requires
- How to make visualizations so my discoveries can be shared with the end user. Unless I communicate my discoveries properly, there may not be much benefit to the process

Feedback

Would love to find the course touching on cloud systems, or distributed systems. However, this was a very well final capstone. ☺