

Mohsin Ehsan

Cover Letter & Portfolio

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Dear Hiring Manager,

With over 7 years of experience with Business Intelligence and Business Analysis, I believe I am a great candidate for this role. Having worked mainly within the Product Management department of Rogers Communications, I liaised with Marketing, IT, Sales and other teams regularly. I have advanced expertise with SQL and visualization tools, and I received a performance award in December 2018 which proves my work ethic.

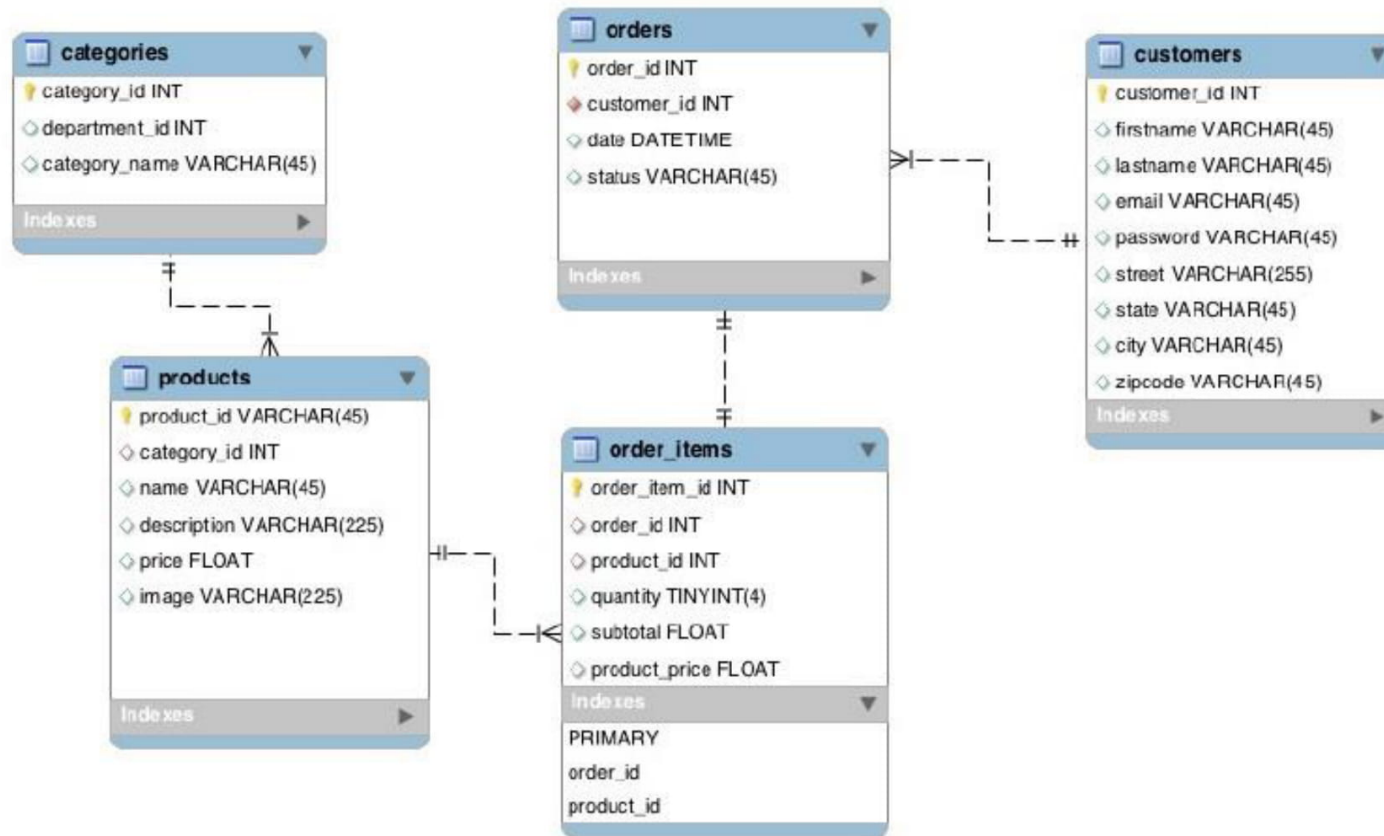
I am seeking a position in which my solid experience can create a productive and trustful relationship with key stakeholders, in order to achieve your organization's goals. I have worked with major stakeholders including Apple and Ericsson, and functioned as an analytics SME in the Product Management team, for major Wireless products for Rogers, including Roam Like Home, Long Distance, Device Protection, Voicemail and others.

I have extensive business knowledge of tactical and strategic concepts employed by industry leaders. I believe that my leadership abilities, in-depth experience with technical tools and interpersonal skills, allow me to offer a truly unique set of abilities. I'm confident that I can become an invaluable resource for your team. Please review my accompanying resume and this portfolio for a more detailed presentation of my expertise and career history. Thank you for your time and consideration.

Sincerely,

Mohsin Ehsan

Relationship Diagram



SQL Script

Window Functions in
SQL Server:

Rank Product
Categories
(by Sales Amount)
by City
(For Cities with over 100
Customers)

```
MOHSIN_DB_TESTS...dministrator (56))* -> X
--STEP 1) GET CITIES WITH MORE THAN 100 CUSTOMERS
SELECT CUSTOMER_CITY, COUNT(DISTINCT CUSTOMER_ID) TOTAL_CUSTOMERS
INTO #REF_CITIES
FROM MOHSIN.DBO.CUSTOMERS
GROUP BY CUSTOMER_CITY
HAVING COUNT(DISTINCT CUSTOMER_ID) > 100

--STEP 2) COLLECT ALL ORDERS BY RELEVANT CITIES
--> NOTE, FILTERING ON "COMPLETED" ORDERS FOR SALES_AMOUNT
DROP TABLE #SALES_COMPLETED_ORDERS1
SELECT DISTINCT A.CUSTOMER_CITY, B.ORDER_ID, C.ORDER_ITEM_QUANTITY, C.ORDER_ITEM_PRODUCT_ID, C.ORDER_ITEM_SUBTOTAL
INTO #SALES_COMPLETED_ORDERS1
FROM MOHSIN.DBO.CUSTOMERS A
INNER JOIN MOHSIN.DBO.ORDERS B
ON A.CUSTOMER_ID=B.ORDER_CUSTOMER_ID
INNER JOIN MOHSIN.DBO.ORDER_ITEMS C
ON B.ORDER_ID=C.ORDER_ITEM_ID
INNER JOIN #REF_CITIES D
ON A.CUSTOMER_CITY=D.CUSTOMER_CITY
WHERE ORDER_STATUS = 'COMPLETE' ----- << STATE THIS ASSUMPTION WITH RESULT ('SALES' = COMPLETED ORDERS)

SELECT DISTINCT A.*, B.PRODUCT_CATEGORY_ID, c.CATEGORY_NAME
INTO #SALES_COMPLETED_ORDERS2
FROM #SALES_COMPLETED_ORDERS1 A
LEFT JOIN MOHSIN.DBO.PRODUCTS B
ON A.ORDER_ITEM_PRODUCT_ID=B.PRODUCT_ID
LEFT JOIN MOHSIN.DBO.CATEGORIES c
ON b.PRODUCT_CATEGORY_ID=c.CATEGORY_ID

SELECT DISTINCT CUSTOMER_CITY, CATEGORY_NAME, SUM(ORDER_ITEM_SUBTOTAL) AS COMPLETED_SALES
INTO #SALES_COMPLETED_ORDERS3
FROM #SALES_COMPLETED_ORDERS2
GROUP BY CUSTOMER_CITY, CATEGORY_NAME

--- ADD RANK:
select CUSTOMER_CITY, CATEGORY_NAME, COMPLETED_SALES
, RANK() over (partition by CUSTOMER_CITY order by COMPLETED_SALES DESC) as RANKING
INTO #SALES_COMPLETED_ORDERS4
FROM #SALES_COMPLETED_ORDERS3

-- RESULT: TOP 5 CATEGORIES, BY CITY (BASED ON COMPLETED SALES)
SELECT CUSTOMER_CITY, RANKING, CATEGORY_NAME, COMPLETED_SALES
FROM #SALES_COMPLETED_ORDERS4
WHERE RANKING <= 5
ORDER BY CUSTOMER_CITY, RANKING, CATEGORY_NAME
```

74 %

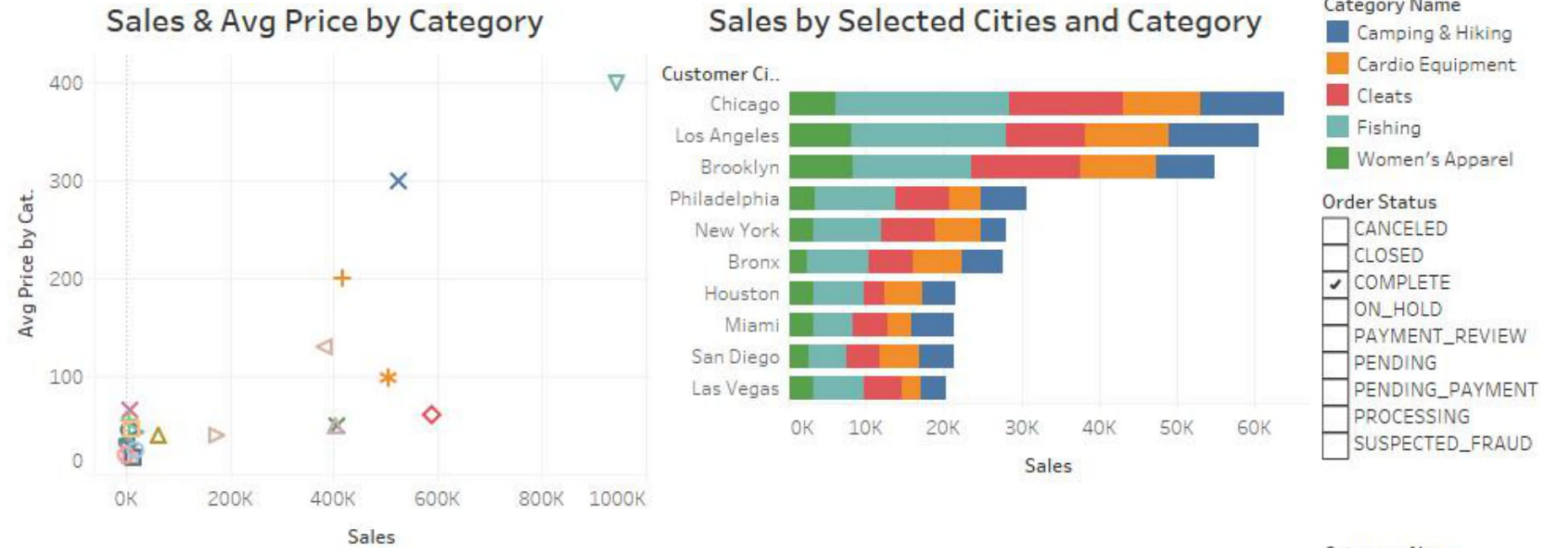
Results Messages

	CUSTOMER_CITY	RANKING	CATEGORY_NAME	COMPLETED_SALES
1	Bronx	1	Fishing	7999.6
2	Bronx	2	Cardio Equipment	6399.36
3	Bronx	3	Cleats	5639.06

Tableau Report

- ❖ Scatter Plot
- ❖ Top 5 Categories by Top 10 Cities
- ❖ Map of the New York Region (Sales)

Tableau Sample Dashboard - Mohsin Ehsan

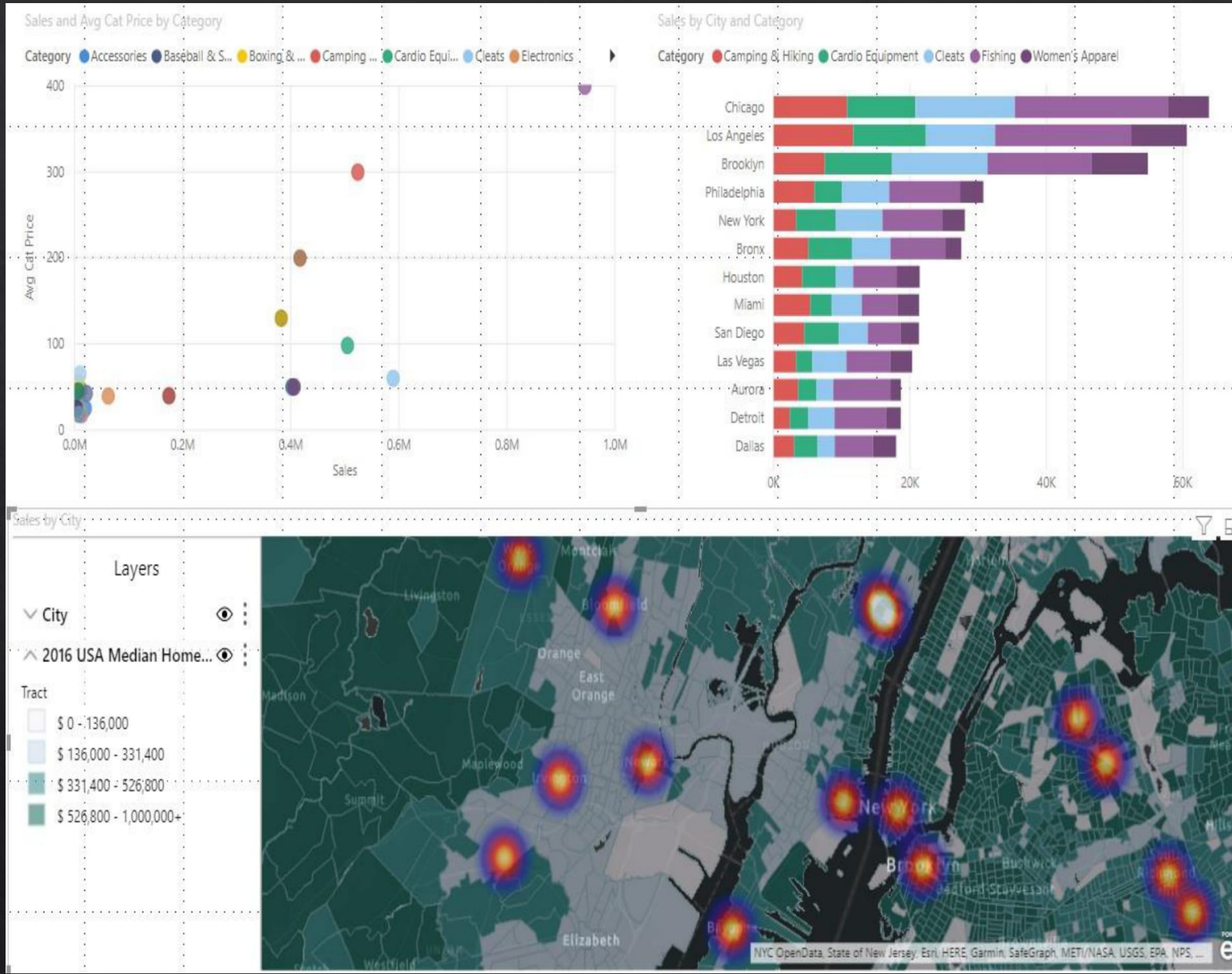


NY Region - Total Sales



Power BI Report

- ❖ Scatter Plot (Price-point versus Sales)
- ❖ Sales of Selected Categories by City
- ❖ Heat Map of NY Regional Sales (with Median Household Income)



Python Machine Learning Example

- ❖ Simple Linear Regression
- ❖ Home-price prediction based on an independent variable: Area (square feet)
- ❖ Performed with:
 - Python 3.7 (Anaconda)
 - Jupyter Lab
 - Scikit-learn
 - Pandas
 - Matplotlib

