



# *Turning Data into Actionable, Understandable, & Cheerful Insights*



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Data Analyst



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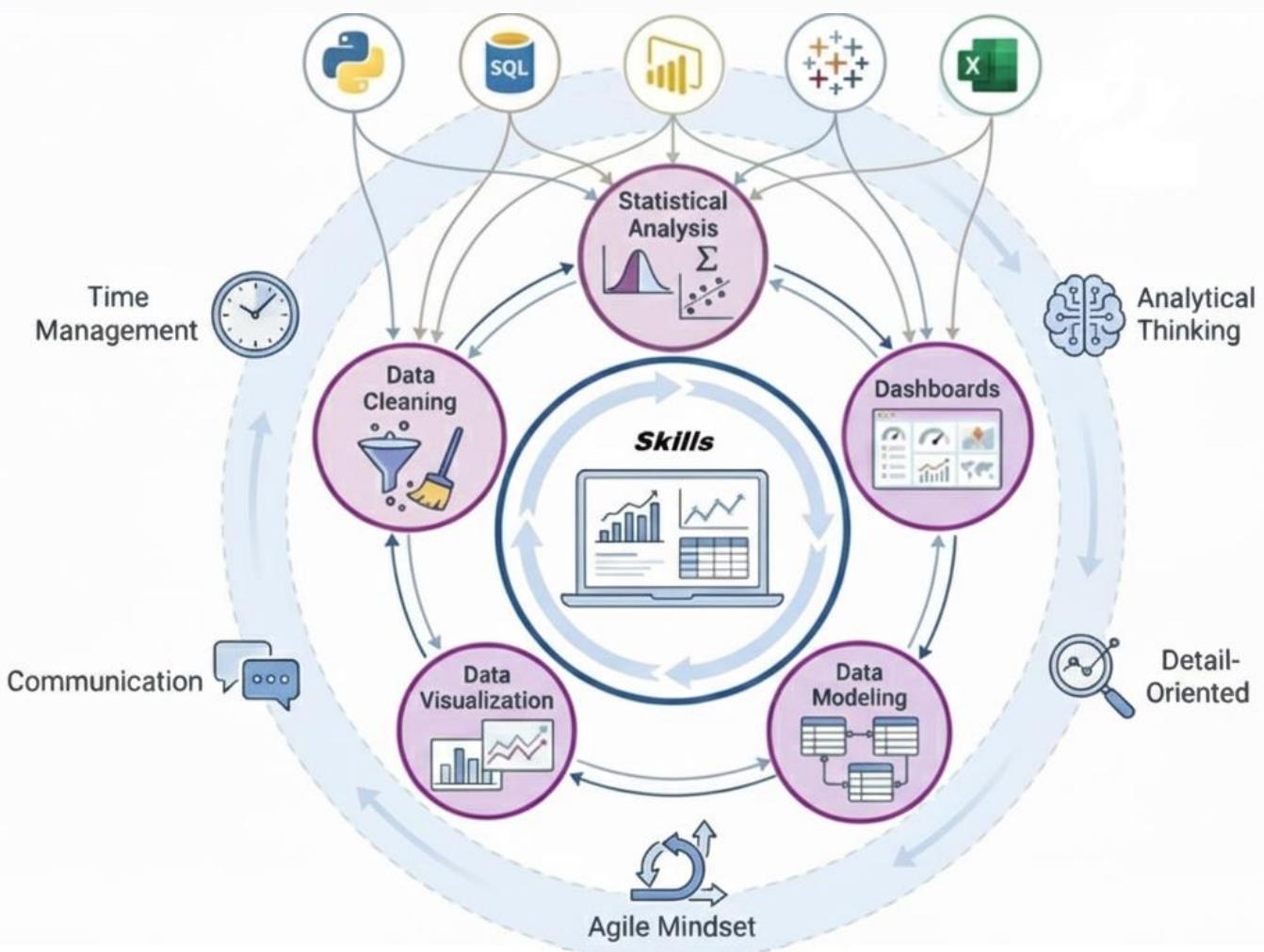
Let's work together

# Elevate your Business with Analysis

Hello, I'm Hend. Working as an accountant & dealing with numbers made me realize my passion for gathering & analyzing data to understand my surroundings & extract insights that satisfy my curiosity.

Over the past four years, I have developed strong skills in data analysis, strengthening my technical proficiency & fueling my drive to extract understandable, actionable insights that meet high-quality standards using Python, SQL, Tableau, Power BI & Excel.

With a detail-oriented, perfection-driven, & analytical mindset—as well as a creative edge—I can deliver visually compelling & efficient insights that align with your quality standards.



*By hiring me, you gain a dedicated professional with a strong analytical skill set, a keen eye for detail, & a commitment to delivering actionable insights & efficient solutions tailored to your business needs.*



- Understand business context and prepare reliable datasets using SQL, Excel, Python, and BI Tools.
- Clean and standardize missing values, duplicates, and inconsistencies with strong attention to detail.
- Validate data logic and relationships through careful review & critical thinking.
- Ensure accuracy & accountability to support trustworthy analysis & decisions.



### *Data Understanding & Preparation*



- Provide practical, data-driven recommendations aligned with business goals.
- Document insights clearly to ensure transparency & trust.
- Adapt analysis based on feedback with flexibility & openness.
- Collaborate effectively with stakeholders to support informed decisions.

- Explore data to identify trends, patterns, & performance drivers using structured analytical thinking.
- Break complex problems into clear, testable questions with curiosity & persistence.
- Apply comparisons, segmentation, & reasoning to explain business behavior.
- Translate findings into clear, logical conclusions with confidence & responsibility.



### *Analytical Thinking & Problem Solving*

### *Decision Support & Collaboration*

### *Visualization & Storytelling*



- Build clear, user-focused dashboards in Tableau, Power BI, & Excel with strong visual judgment.
- Select charts based on message & audience, not appearance.
- Organize insights into a logical flow that supports understanding & action.
- Communicate results in a simple, honest, & engaging way.

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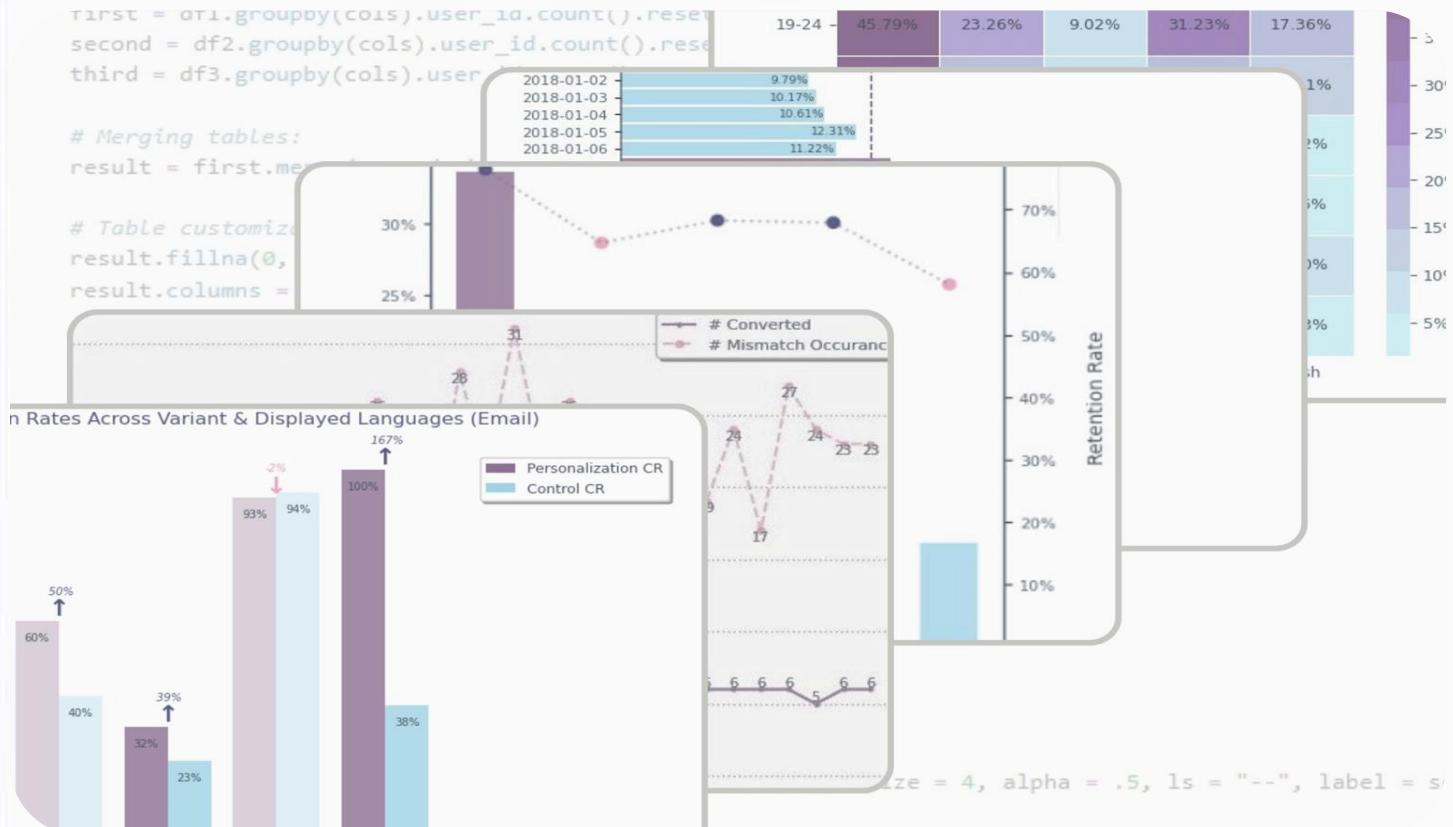
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# Analyzing Marketing Campaigns

**Python**



- Analyzed **7K** users across multi-channel ad exposures & subscription behavior during **Jan 2018**.
- Detected Duplicate & near-duplicate records, missing values, user-level inconsistencies, & technical bug in House Ads.
- Users under 30 had a higher average conversion rate ≈ **19.29%** compared to **7.29%** achieved by users above 30.
- **22.93%** of users saw the ad multiple times leading a conversion rate ≈ **17.83%** & retention rate around **70.19%** compared to **11.58%** & **64.01%** for the ones who saw the Ad once.
- Detected House Ads failure after **Jan-10** causing ~**26 lost subscribers**.
- A/B test showed **+38.85% uplift** in email personalization ( $p \approx 0.65\%$ )

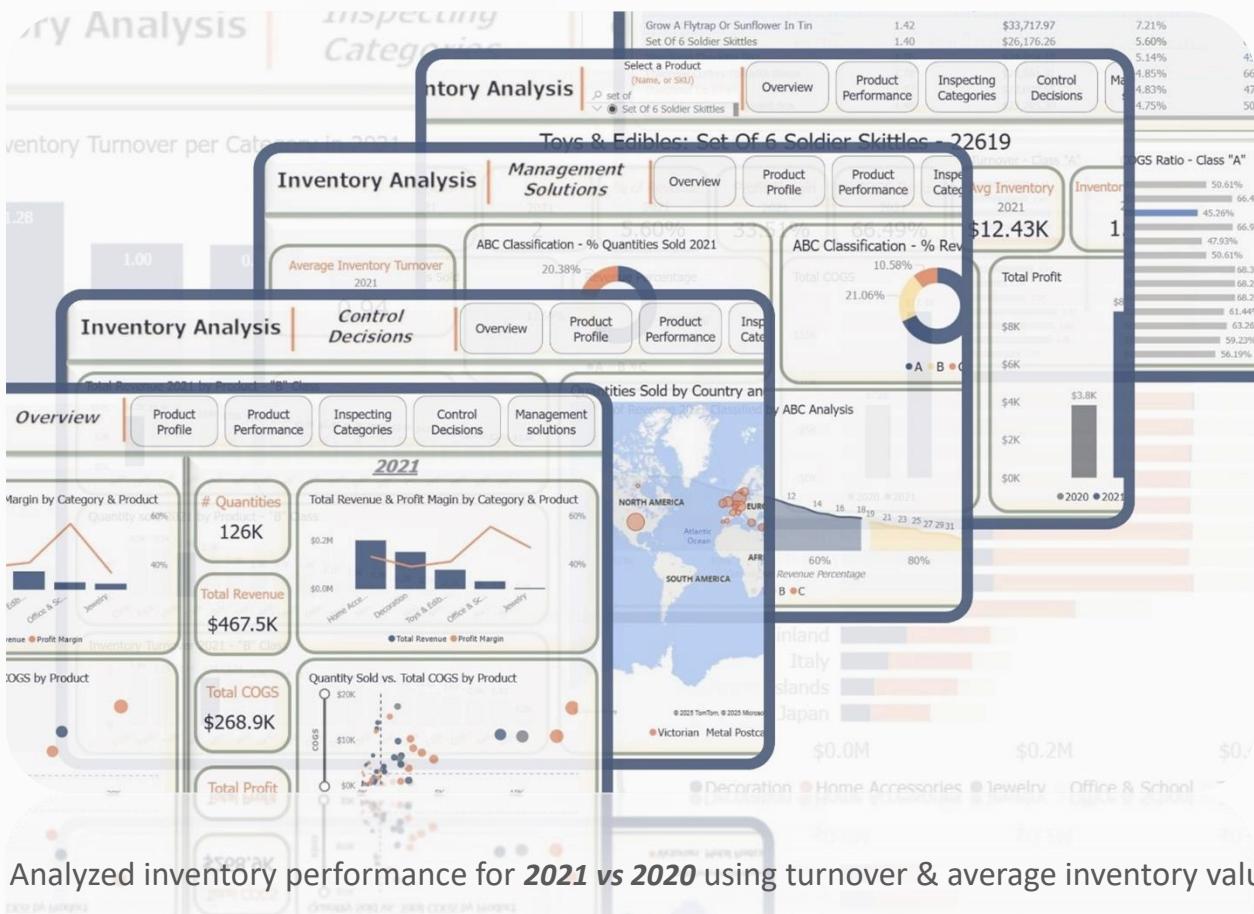
## Recommendations:

- budget shift toward **Email, Instagram, & Facebook**.
- Fix the language-serving bug immediately.
- Adopt **multi-touch** exposure strategy
- Improve tracking infrastructure to prevent duplicate conversions & inconsistent logs.

# Inventory Analysis – WarmeHands Inc. (2021 vs 2020)



## Power BI



- Analyzed inventory performance for **2021 vs 2020** using turnover & average inventory value.
- Applied **ABC Analysis** to rank products by revenue impact.
- Set of 6 Soldiers Skittles generated **\$8.78K** profit on just **2.3K** Q sold.  
*(Highly profitable despite low volume.)*
- **3 "A"** items had similar turnover rates, showing consistent dem&.
- Jewelry category: **100% C-class** products → **weak profitability.**  
*(Category needs reevaluation.)*
- Victorian Metal Post Card "B" had **high turnover** despite **small revenue.**  
*(Dem& exists but stock is limited.)*
- **A & B** classes had a similar num. of products, but **A** items dominate revenue due to stock scale.  
*(A = 70% revenue coverage, & B = 20% coverage).*

### Recommendations

- Prioritize A class products with low COGS ratios to maximize profitability.
- Increase inventory of promising B class items, to capture unmet dem&.
- Reconsider or downscale the Jewelry category, as all products fall into C class with poor returns.
- Combine ABC Analysis with turnover insights, since high-dem& items can exist outside A class.

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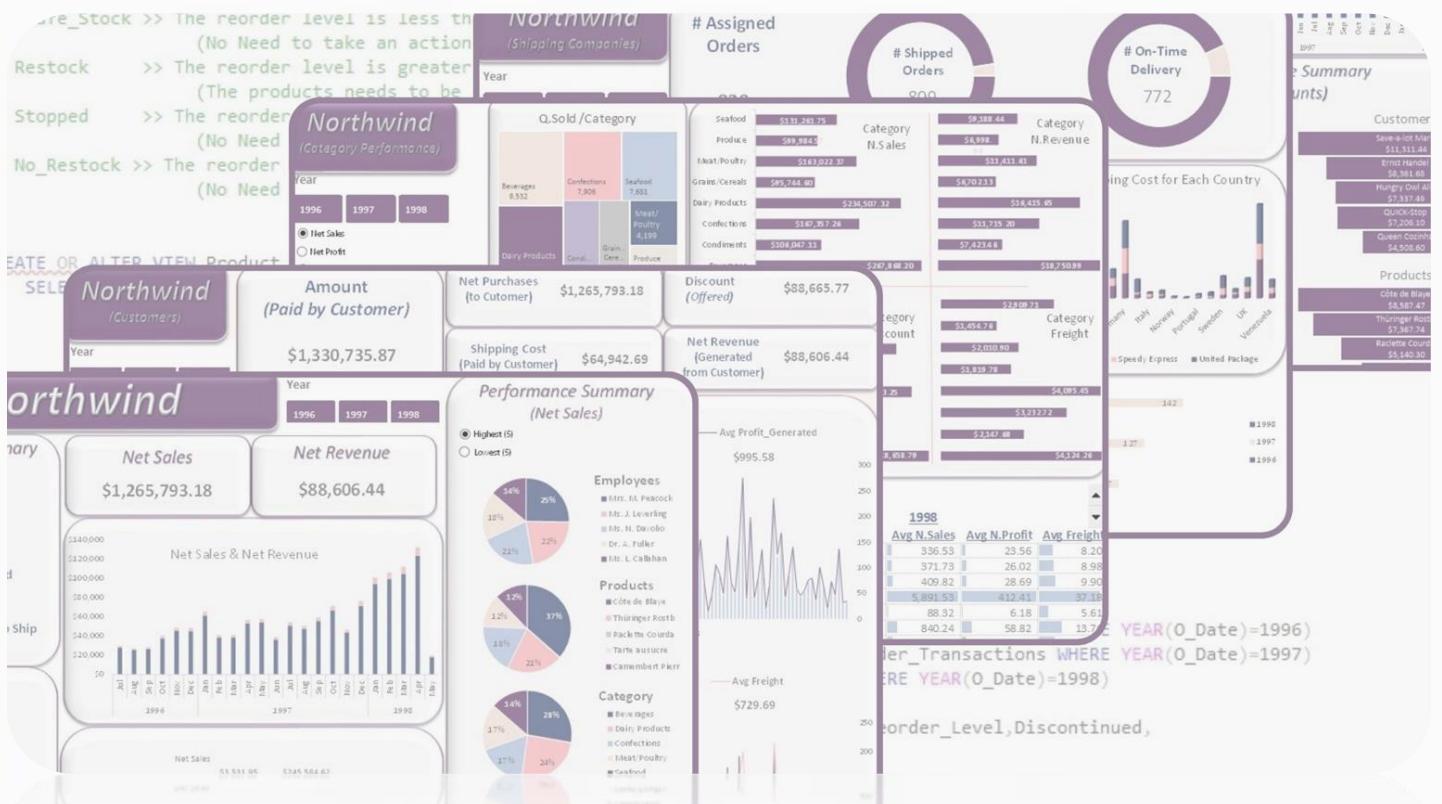
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# Northwind

## SQL, Python, & Excel



- Analyzed **830** orders, **89** customers, & **51,317** units sold across **1996–1998** with adjusted **YoY** comparisons.
- Managed inconsistencies in order quantities & stock levels, & standardized date data types.
- Analyzed growth across inconsistent time periods to derive accurate trends.
- 89.87%** of products active; **23.35%** required restocking.
- Beverages led all categories with net sales ≈ \$268K, net revenue ≈ \$19K, discounts ≈ \$19K, & freight ≈ \$4K in freight for the Whole period.
- Top Countries by Sales: USA (**1996≈ \$35K, 1998≈\$93K**), Germany (**1997: \$117K**).
- USA had the most customers (**13**), & highest **discounts** (**≈ \$17.98K**) & net sales (**≈ \$245.58K**).

### Recommendations

- Use reorder level & stock status data to streamline restocking processes.
- Increase on-time deliveries by selecting shipping companies based on past performance.
- Focus on high-growth markets, like the USA, & monitor purchasing trends for customer retention & acquisition strategies.

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# Human Resources Dashboard

## Tableau



- Analyzed **8,950** employees (**7,984** active | **966** terminated) across **7** departments & **8** locations (NY is HQ) from **2015** to **2024**.
- Designed clear, purpose-driven visualizations & an employee detail table.
- Performed statistical analysis on hiring, terminations, & salaries
- Hiring & terminations: **positive correlation**, strongest in Operations (**30% for both**).
- termination rates were balanced at **11%** for both males & females.
- high school graduates often needed improvement (**34%**), while (**48%**) of PhD holders were rated excellent.
- Managers earned more overall, with role-based exceptions.  
*HR Manager considerably low ≈\$82K*
- salary might be determined more by age & experience than by position.

### Recommendations

- Investigate turnover causes by role & department.
- Review salary equity across education & gender.
- Align performance ratings more closely with retention & compensation.

# No Show Appointments



## Python



- Examined a dataset of **100K** medical appointments in Brazil, determining factors impacting attendance.
- Cleaned & visualized data to show that longer wait times & lack of reminders contributed to no-shows.
- Demonstrated that confirmation messages increased attendance by over **10%**.
- Patients are more likely to attend appointments with shorter scheduling gaps.  
*Attendance Rates → same-day = 95.34%, narrow-gap = 77%, moderate-gap = 71.46%, & long-gap = 67.29%.*

### Recommendation

- Implement **automated SMS or phone reminders** to improve attendance rates, especially for moderate to long-gap appointments.
- Focus on offering **same-day or short-gap** appointment slots to increase attendance.

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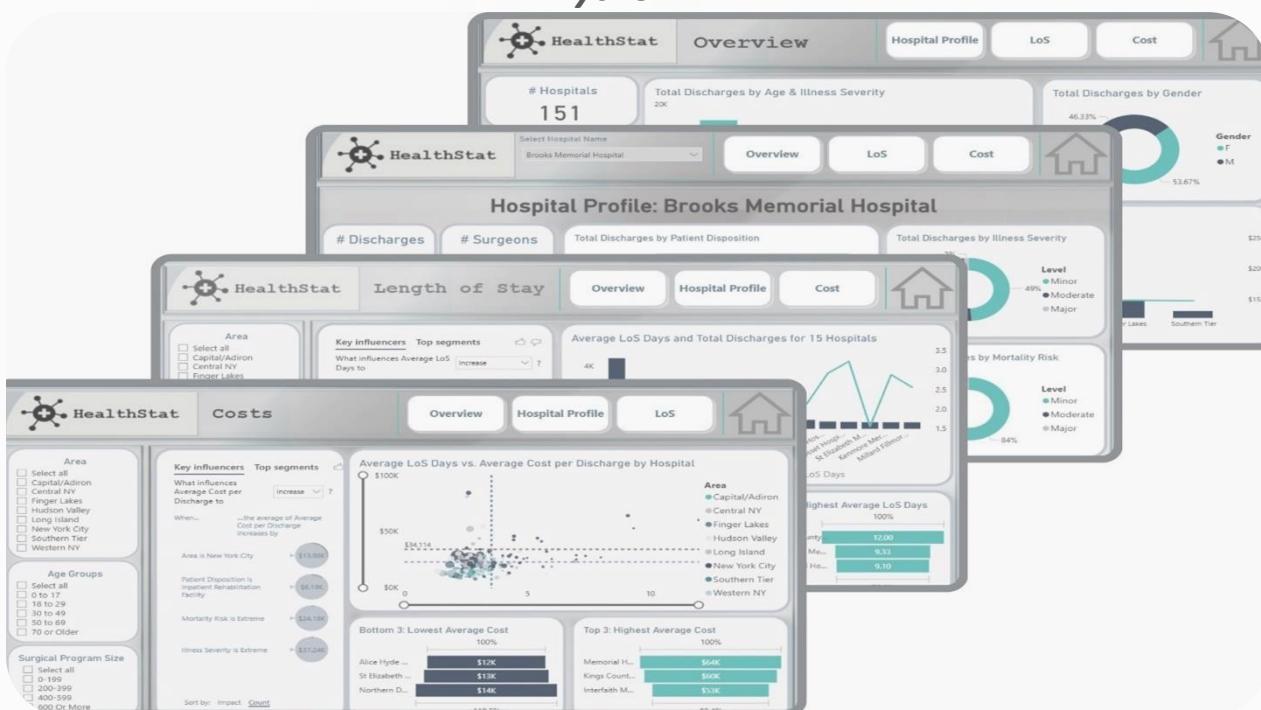
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# HealthStat

## Python



- Analyzed elective hip replacement cases across 151 NY hospitals to identify key drivers of Length of Stay & treatment cost.
- 26K hip replacement surgeries conducted by 627 surgeons with an average cost  $\approx \$21K$  & Average LOS  $\approx 2.65$  days.
- Found that patients aged over 50 constituted the majority, with illness severity ranging from minor to moderate.
- NYC recorded the largest number of hospitals (44), with the highest average cost of \$25.5K. Also, Long Island had the second highest average cost (\$25.4K) despite ranking third in hospital count.
- Applied root cause analysis to uncover the main factors influencing both LOS & cost.

Influence Factor	Length of Stay (LoS)	Cost
Extreme Illness Severity	$\uparrow 9.02$ days	$\uparrow \$37.24K$
Extreme Mortality Risk	$\uparrow 6.11$ days	$\uparrow \$24.18K$
NYC hospitals	$\uparrow 1.51$ days	$\uparrow \$13.98K$
Fracture of Neck of Femur (Hip) Diagnosis	$\uparrow 1.77$ days	

### Recommendation

- Hospitals, particularly in NYC, should explore process optimization strategies for patients with extreme illness severity or mortality risk.
- Establish regional benchmarks for cost & LOS, with Long Island requiring closer evaluation due to disproportionately high costs.

It was a pleasure to go through your code. I'll also suggest using the documentation you created to showcase this work since it is a great project you achieved here. Perhaps you could even try to blog about what you've learned. Keep up the good work! 😊👍

### Udacity Team

So proud of you & your captivating analysis. I hope you enjoyed the journey as much I enjoyed reviewing your project. 🎉 The visualizations are neat; you followed the correct steps in documenting the cleaning process & draw an accurate conclusion. Keep the great work.

### Udacity Team

# Highlights

Hend has demonstrated commendable dedication & enthusiasm for the course. Her consistent performance, active engagement, & eagerness to learn make her a standout student. I look forward to seeing her continue to excel in future endeavors.

### Mayar Ayman - DEPI

I wanted to express my utmost gratitude for all the consistency you have done so far, & your analytical skills will drive you to move forward to the right direction. 😊

### Udacity Team

## Courses & Certificates

Associate Data Analyst – **DataCamp**

SQL Associate – **DataCamp**

Python Basics – **ITI**

MCIT Certificate Programs: Data Analytics – **IBM**

Database Fundamentals – Mahara-Tech, **ITI**

Atlassian Agile Project Management Professional Certificate – **Atlassian**

Project Management Foundation – **PMI® & NASBA**

Agile Explorer – **IBM**

Big Data 101 – **IBM**

Artificial Intelligence Fundamentals – **IBM**

Data Fundamentals – **IBM**

DEPI - Data analysis Specialist – **MCIT**

FWD Initiative - Data Analysis Nanodegree – **Udacity & MCIT**

FWD Initiative - Web Development Challenger – **Udacity & MCIT**

FWD Initiative - Data Analysis Challenger – **Udacity & MCIT**

## Education

Managerial Accounting & Cost Dipl. – **Alexandria University**

Bsc. Commerce (English) – **Alexandria University**

**Accountant****Megalectric for Imports – ALX, EG**

- Conducted data analysis on inventory prices using LIFO, examining data from 2007-2017, potentially impacting 40% of product prices.
- Analyzed financial data to identify deficiencies, duplications, and areas of extravagance.

**Purchasing Coordinator/Accountant****Volta Trading – ALX, EG**

- Analyzed and negotiated supplier data to establish purchase agreements and gather pricing information.
- Conducted detailed analysis of price proposals and financial reports to determine reasonable costs.
- Prepared purchase orders, achieving an 80% success rate in cost-effective procurement based on data analysis.

**Customer Service Administrator****Horus Training Center – ALX, EG**

- Dealt with customers inquiries & gathered data of potential customers.
- Worked on marketing monthly courses & achieved the monthly target with a success percentage of 85%.
- Handled the center accounting transactions.

**Crew Coordinator Assistant****Wilhelmsen Ships Service – ALX, EG**

- Collected and analyzed data for 50% of the ships handled from 2000-2010, ensuring comprehensive records.
- Arranged and analyzed data for hotel accommodations and transportation for crew members.

## ***Let's Work Together!***

I'm excited to hear about your project. Whether you need data analysis, visualization, data modeling, or any other related services, I'm here to help.

***Get in touch with me:***



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