**5 Things I \*Actually\* Work on as a Data Analyst in 2022**

Hear from a healthcare data analyst on the role and responsibilities



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If you’re scouring the internet to read a realistic job description for data analysts, this is the perfect literature to have landed.

Hi, I am Rashi, a healthcare ***Data Analyst*** based out of ***Chicago.***

It’s been almost a year since I started working as a data analyst and I enjoy working on every aspect of my job. As a new grad starting or a professional switching careers, we have questions about the difference between data scientists and data analysts, what they work on, and the skills required at jobs thereafter.

When I was starting, I took time to understand if I felt more inclined to work as a Data Scientist or a Data Analyst.

In the rapidly expanding technology landscape, data empowers business decision-making, Data and analysts are everywhere — from finance to healthcare, criminal justice to fashion, food, sports, and dating — among many others, there is much to be learned and explored. Job roles and responsibilities of Data Analysts vary with each business and team, however, the “foundational” structure remains the same.

Identify the data to analyze >> collect the data >> clean >> analyze >> interpret results

Based on that lifecycle, I can distinctively point out five essential processes I find most involved with data in perspective.

**1. Data Querying — lots and lots of SQL**

For any data analyst, everything starts and ends with the data.

The collection of data is 8 out of 10 times using a Structured Query Language (SQL) query. SQL is the most in-demand skill for Data Acquisition & Analytics roles across businesses. The tools can vary from on-premise to cloud — Microsoft SQL Server, Teradata, MySQL, Squirrel SQL, Hadoop, Snowflake, PostgreSQL, Oracle

The interview questions for SQL can be super daunting for data analyst roles but trust me when I say, you always have some past query to refer back to when on the job. I come face-to-face with questions like —

*Should these tables be joined with Left Outer Join or Left Inner Join?*

*How to include two columns with the same names from two tables without error?*

*Should I be using JOIN or UNION for two tables?*

A thorough understanding of case statements, aggregate functions, Entity Relationship Diagrams (ERD), and other basics of SQL provide a good head-start on your Day 1 at work, for sure.

Almost every business has its data stored in relational databases. And by using SQL, the goal is to fetch information from databases quickly, thereby saving efforts in time and money. As data analysts, a strong base in SQL is a power move and can make your lives much easy at work!

**2. Data Modeling**

(the preface of this data modeling is collecting and cleaning the data to be analyzed)

As a data analyst, I am responsible to design, create and manage anything and everything under the data analytics umbrella — can be creating a predictive model in Excel or a programming tool of choice or creating a dashboarding to showcase employee capacity vs business demand or creating a monthly deck to report system performance. This also includes statistics and math. I spend days analyzing the data points and their relationship to the factors.

My responsibilities as a Data Analyst include:

1. Collecting, integrating, and analyzing data from sources related to claims, processes, and the book of business
2. Supporting strategic needs with reporting, predictive models, dashboarding, and analytics initiatives in support of the business
3. Continuously gaining a deeper understanding of the data to meet business requirements
4. Interfacing with cross-functional teams to leverage tools and help build actionable analyses
5. Taking upon accountable leadership while working with partners and stakeholders to set and follow a project plan

**3. Data Reporting**

Understand pain points and translate data for business insights

As a data analyst, one of the pivotal, and quintessential to-do’s is building and automating reports. In my role, I work very closely with cross-functional teams and partners across the enterprise like the product, sales, marketing, and delivery to understand their reporting needs.

Reporting can either be a one-off analysis presented in an Excel spreadsheet or recurring presented through a Tableau dashboard. A good grasp of the reporting capabilities enables me (and other data analysts) to shed light on actions and implicit insights from data.

As a data analyst, you are also responsible to maintain and update the report as needed. The bottom line is to ensure a report displays accurate results.

**4. Storytelling with data**

Data can’t talk or affect change by itself. There must be someone to organize and interpret it.

Let’s say, you have been asked to track changes in day-to-day product inventory, with a spotlight on the holiday season. From the analysis, you identified a few products with low demand and large warehouse inventory, repeating every quarter. Would you prefer to communicate the story in words or narrate a drill down with visuals to invite an engaging conversation?

Traditionally, visuals claim greater attention during a presentation and focus on better communication. In today’s world, executives and senior leadership demand to look at a one-stop shop for quick and efficient decision-making.

I have worked on multiple executive dashboards, aka strategic dashboards where the intent is to **provide the executives with a comprehensive overview** of the problem statement, how it is performing against established KPIs and the steps to be taken to fix any issues.

With the idea of storytelling with data, the goal is to deliver updated and near real-time data to make effective data-driven decisions, whenever needed.

**5. Hone on business acumen, every day!**

As data analysts, I cannot stress enough how important it is to understand the business at the deepest depth you can.

While there is no single definition for business acumen, I would understand the term as the *ability to translate business problems into data and connect it back to business impact*.

I can never work on analyses without asking for the business context from the stakeholders. For any analysis at hand, unless you understand the business, you can never know what an error in the model means for the business, why are the numbers inflated for a county with a low population post product launch, etc.

That is also the reason why job descriptions for financial analysts or healthcare analysts require prior business experience or field knowledge. Your analyses tend to lose the essence and impact it is supposed to create, in absence of relevant business understanding.

Learn your area of business, every growing day!

That’s it from my end for this blog. Thank you for reading! Let me know in the comments about your data journey, what are you looking to explore in 2022!

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Happy Data Tenting!