

Assignment-3

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In an Organization that is highly driven by data, there are likely to have a variety of analyst roles organized into multiple teams. The general job description of a Data Scientist, Data Analyst, Analytics Engineers, Business Analysts, Data Architects etc. is to understand and use the data to provide better results, which improves the Organization's growth.

Data Scientist/Analyst's job is to understand the data, clean the data, write an algorithm and optimize the algorithm created. The three parts of Data Science are Math, Data and Process, but the real value of Data Science is in the data. The real value of the data is found by the analyst integrate and process the data. [\[1\]](#)

Technical Qualifications

Educational Qualifications:

A Bachelor's Degree for entry-level positions in the field of Computer Science, Statistics, IT and Mathematics with good programming skills, computer knowledge involving Excel and other basic visualization tools are required.

A Masters Degree from the Data Science field with strong problem-solving skills and skilled at descriptive statistics for positions that are considered upper-level.

Technical Skills:

A particular individual applying for these positions should be really comfortable with Problem solving, Machine Learning, statistical computer languages like R, SQL, Python etc. to manipulate and draw insights from the data. One should be really skilled at big data tools such as SAS, Tableau, Hadoop, MapReduce, Gurobi. [\[2\]](#)

Others include

- Detail oriented and Methodical, Appropriately Skeptical, Confidence, Good communication skills, Pragmatic and Business-Savvy.
- Producing reports, setting up the infrastructure, file inspection, and Manipulation. [\[3\]](#)

Experience

An average work experience of 3-5 years is crucial for growth in the field of Data Analytics such as Data Scientist/Analyst, Senior Data Manager for an upper-level position.

Experience of 10-15 years is essential for the positions of Big Data Solution Architect, Data Scientist, and Data Analytics Project Manager.

Salary

The salary of an entry-level data analyst will be ranging from \$35K to \$60K per annum and highest pay \$82,600. The average salary of a data scientist is \$113,436 [\[4\]](#)

Chief Data Officer (CDO)

The Chief Data Officer is the person responsible for the organization's exponential growth which includes the strategies in the collection of data and analytics process.

- A CDO manages open government data effort including how the organization offer APIs and create public data products.
- Reduce the data management prices and increase the value of the organization's data.
- Enhance how the organization collects, uses, manages and publishes data.
- Enhance the quality of data and how the organization measures the quality of data.
- Make sure the data is regular, reliable, consistent, secure, and timely to support the organization's activity. [5]

The education qualification for a CDO is to have a Ph.D. in Data Science, Management and Statistics and work experience of over 10 years as Senior Data Analyst is also accepted.

References

1. Silicon. "If You Want to Be a Data Scientist, You Need to Know about These 6 Trends." *Silicon Republic*, 25 Oct. 2017, accessed on 23rd September 2018 www.siliconrepublic.com/advice/data-scientist-trends.
2. Malvik, Callie. "Callie Malvik." *Rasmussen College - Regionally Accredited College Online and on Campus*, accessed on 23rd September 2018 www.rasmussen.edu/degrees/technology/blog/what-does-a-data-analyst-do/.
3. Anderson, Carl. "Creating a Data-Driven Organization." *O'Reilly | Safari*, O'Reilly Media, Inc., accessed on 23rd September 2018 www.oreilly.com/library/view/creating-a-data-driven/9781491916902/ch04.html.
4. "How Much Is a Data Scientist's Salary? | University of Wisconsin." *University of Wisconsin Data Science Degree*, 15 Sept. 2017, accessed on 23rd September 2018 datasciencedegree.wisconsin.edu/data-science/data-scientist-salary/.
5. "CDO Position Description." *Principles - Project Open Data*, accessed on 23rd September 2018 project-open-data.cio.gov/cdo/.