


THE ROLE OF DATA SCIENCE IN SIMPLIFYING HOW WE UNDERSTAND DATA			Computer Science
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Mefail Tahiri	University of Tetova, North Macedonia		
Ejup Rustemi	University of Tetova, North Macedonia		
Abstract			
<p>Data science is a discipline that allows exploration and analysis of raw data within a company. This analytics concept is essential for predicting and anticipating problems that may arise. What are the goals of data science? What is the job of a data scientist? Why is a data scientist of great value to a company? Find the answers to these questions in the following article. Data science or data science is a concept that combines data inference with the development of algorithms and technologies. Data science is a discipline that solves complex analytical problems within an organization. This concerns the masses of data stored in corporate databases. This data analysis is used by companies to generate added value for them.</p>			

INTRODUCTION

On the one hand, data science makes it possible to discover insights in the data and to ensure the creation of a Data Product.

The in-depth analysis of this information on a granular level, will allow users to understand and better identify trends and behaviors. The analysis of the variation of trends will be of great help in the decision-making process.

The creation of *Data Product* is done through various algorithms. It can be for example a recommendation engine, based on the data of each user. Users will then benefit from a personalized recommendation according to their needs.

The professional qualified in data science is called “data scientist”. It is a profession in its own right that requires great expertise in mathematics, technological development and *business intelligence*.

WHAT DOES A DATA SCIENTIST DO?

A data scientist or data analyst is a professional who is responsible for cross-referencing data from a specific company with web data.

This cross-referencing of data will play an important role in strategic and operational decision -making within the organization.

He is not just a statistician, the data scientist ensures:

- A proposal of recommendations on the data to be modified, outsourced or internalized;
- A design of data warehouses;
- An evaluation of the data;
- Processing and restitution at the targeted system level.

The most common careers in the data science industry are:

- The data scientist;
- The chief data officer;
- The big data architect;
- The Master Data Manager;
- The data miner;
- The data analyst.

This is a highly sought-after profession in the world of digitalization, ensuring good career prospects.

UNDERSTANDING DATA

To work as a data analyst or data scientist, it is essential to have some advanced mathematical skills.

If statistics are important, machine-learning algorithms are based on *linear algebra*, requiring knowledge of math.

A good data scientist will also need to have excellent skills in technological creativity, to code and create prototypes that can integrate complex data.

Having a data scientist on your team will bring real added value to a company.

With the volumes of data processed which are constantly increasing in companies, a data scientist will ensure the predictions necessary for decision-making action.

Quantitative analysis in digital marketing will allow managers to set up an action plan adapted to market developments and current trends.

The strategies implemented focus on points with high potential, for enormous time savings and an excellent return on investment.

With each analysis carried out, there is no way to miss the opportunities that arise. IT tools will be efficient and fully adapted to needs

CONCLUSION

Statistical and strategic analysis must always be measurable and quantifiable to know the real impact of decision-making plans within an organization. A data analyst will be the most knowledgeable in the matter to select the data to analyze without problem. Data visualization will improve customer knowledge in order to improve the relational capacities of the company. All actionable data will facilitate the identification and refinement of target audiences, for rapid business development.

References

- Davidoff, Sh. (2020). *Data Breaches Crisis and Opportunity*, Addison-Wesley, Boston.
- Hoffer, Ramesh, Topi (2011). *Modern Database Management*, Pearson, Boston.
- Jurney, R. (2017). *Agile Data Science*, O'Reilly, Cambridge.
- Kampakis, S. (2019). *The Decision Maker's Handbook to Data Science*; APRESS, London.
- Laursen, Thorlund, (2010). *Business Analytics for Managers*, Wiley, Hoboken.
- Ozdemir, S. (2016). *Principles of Data Science*, Packt Publishing, Birmingham.
- Patil, DJ. (2011). *Building Data Science Teams*, O'Reilly, Cambridge.
- Peng, R.D., Matsui, E. (2015). *The Art of Data Science*, Leanpub, Victoria.
- Prasad, R., Rohokale, V. (2020). *Cyber Security: The Lifeline of Information and Communication Technology*, Springer, Cham.
- Vermaulen, A.F. (2018). *Practical Data Science: A Guide to Building the Technology Stack for Turning Data Lakes into Business Assets*, Apress, West Kilbride North Ayrshire.