Louise Bassog

Dr. Bemley

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**DATA SCIENCE AND ITS RELATIONSHIP TO BIG DATA AND DATA-DRIVEN DECISION MAKING**

Companies have recognized they need to recruit data scientists, university institutions are hurrying to put together data science programs, and media are pushing data science as a popular and even "sexy" career choice. But there is a lot of doubt about what data science is, and this confusion might lead to disillusionment as the notion fades into meaningless chatter if it isn't cleared up. In this essay, we make the case that there are valid explanations for why it has been difficult to pinpoint exactly what constitutes data science. One of the reasons for this is because data science is closely connected with several other significant ideas that are also gaining relevance, such as big data and data-driven decision making. One such explanation for this is that there is a natural propensity to equate what a practitioner performs with the definition of the practitioner's profession; as a result, the principles of the subject are sometimes overlooked. We do not subscribe to the view that it is of the highest significance to try to accurately define the bounds of data science. In an academic setting, we can discuss where the boundaries of the field lie; however, for data science to be of use to business, it is essential to I understand its relationships to other significant related concepts and begin to identify the fundamental principles that underlie data science. As soon as we accept, we will be able to comprehend and describe in more detail exactly what the data science field has to offer. In addition, we shouldn't feel comfortable calling it "data science" until we have fully embraced. In this post, we will provide a point of view that discusses all these different notions. In conclusion, we will provide an example for each of the essential concepts that underlie data science and then move on.

A set of basic principles that support and direct the systematic extraction of information and understanding from data is what we mean when we talk about data science. Data mining, which is the process of extracting knowledge from data using technologies that include these principles, is one of the concepts that is maybe most closely associated with data science. There are hundreds of distinct algorithms that may be used for data mining, and the processes that are used in this area involve a great lot of attention to detail. We contend that, despite the seemingly endless number of specifics, there is, in fact, a far more limited and condensed body of fundamental principles.

These concepts and methods find widespread use throughout the many different functional areas of a corporation. Applications in marketing, including targeted marketing, internet advertising, and suggestions for cross-selling, are probably the most extensive and widespread of all business applications. Data science is also used in general customer relationship management to study customer behavior for the purpose of minimizing customer loss and maximizing the number of customers who are expected to remain loyal.