Special issue on “Big Data Analytics and Deep Learning for E-Business Outcomes”

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Today the world is becoming smarter and smarter, in which a business needs an enormous amount of information from both customers as well as its concern to measure and judge its ability, competitive advancement to move forward. According to the International Institute for Analytics, the business, which uses data, will see \$430 billion productive benefits in the year 2020. Indeed, the data is becoming a vital asset for any business to reach a healthy future. Not only the information but its analytics play another significant role in processing it, especially the technology name Big-Data. Data Analysis is significant to make an enormous amount of data turned in to an understandable one. Therefore, these data need Big Data Analysts and Data Scientists. The storage of quality data scientists has made it a job in high demand. A data scientist needs to have varied skills, as the situation is multidisciplinary. This is another challenge faced by the business. The number of data scientists available is very less in comparison to the amount of data being produced.

Companies and organizations use big data to make the best decisions possible. Consequently, the analytics used should be accurate. If the analytics is used to make decisions, which are not precise, it will result in wrong choices that would ultimately be detrimental to the future success of their business. This is the main reason to bring Deep Learning algorithms into big data analytics, which is capable of making human-like decisions through feature learning. Intelligent Computing can be enhanced with the Big Data analytics to enable and interpret large unstructured real-world data and intelligently react to all the entities or events. This special issue seeks to bring forward and highlight the challenges and solutions of enhancing

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Deep-Learning algorithms with Big-Data, to improve the effectiveness and efficiency of any business, which deals with data.

E-Commerce is a very dynamically evolving industry, and this is primarily because of its underlying ever-changing technology. Companies like Amazon, E-bay are capable of building predictive algorithms being executed in real-time on the big-data environment. The primary job of the E-Commerce industry is to make the user experience on their website is delightful. Other than that they are simply a platform between sellers and buyers. With such a focus on user experience, analytics itself becomes a product instead of just being a business enabler. For instance, Recommender Engines you see on Amazon sidebar is a classic product. Now, you can appreciate the much broader role of analytics in the E-Commerce industry. In the following section, we will talk more about broad functions where analytics is being actively used. This special issue carries the solutions for the supply chain management, fraud detection, merchant analytics, recommender system and more based on big data analytics and deep learning methodologies.

This special issue is an ideal platform for the researchers to come out with innovative ideas and approaches in the area of big data and deep learning using these applied soft computing strategies. This issue gains much importance since it directly influences business analytics. It also explores many strategies and solutions that may generate, aggregate, visualize and analyze data are being used for the business, which may overcome the hurdles faced by researchers. On the other hand, these researches cover the insightful trends, patterns of data that create revolutionary changes around. We hope that the practical implementation of this collection of researches may improve technological innovations and excellence for the benefit of humanity.

I wish to thank Editor-in-Chief for giving us the opportunity of serving as Guest Editor(s) of this Special Issue in Information Systems e-Business Management (ISEB). It has been a real pleasure. I also express my gratitude to all members of the editorial office, the authors and to the independent reviewers that had made possible this issue. We hope that this Special Issue will be of high interest to the reader, as we consider that are the contributions contained in it.

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