

## Editorial

We now bring the penultimate issue of the seventeenth volume of the **Journal of Digital Information Management**. This issue is characterized with the below described research papers.

In the opening paper on **“Optimization of Topic Recognition Model for News Texts Based on LDA”** the authors *Hongbin Wang, Jianxiong Wang, Yafei Zhang, Meng Wang* and *Cunli Mao* proposed a non-iterative method for automatically determining the number of topics so that it ensures the optimal number of topics in the model. This method uses Word2Vec for word embedding on corpus text to explore the superior performance of word-related relationships and to express the implicit semantic relationship between topic corpora. This method can effectively find the appropriate number of topics from the news text dataset and improve the accuracy of the LDA theme model.

Now the large centralized databases depend on the use a variety of applications to manage day-by-day business activities in enterprises. The Data Mining tools enable to integrate decision-making tools to analyse and interpret these business data. In the paper on **“An Agent-Based Approach for Extracting Business Association Rules from Centralized Databases Systems”** the authors *Nadjib Mesbahi, Merouane Zoubeidi, Abdelhak Merizig, Okba Kazar* presented an agent-based approach for extracting business association rules from centralized database systems. To validate our approach, the authors applied it during the realization of a real case study on ERP database. The authors viewed that it helps to improve and accelerate the process of extracting association rules by business through centralized database systems.

In the next paper on **“Subjective Sentiment Analysis for Arabic Newswire Comments”**, the author *Sadik Bessou* presented an approach based on supervised machine learning methods to discriminate between positive, negative and neutral Arabic reviews in online newswire. Their proposed model used both count and TF-IDF representations and apply six machine learning algorithms; Multinomial Naïve Bayes, Support Vector Machines (SVM), Random Forest, Logistic Regression, Multi-layer perceptron and k-nearest neighbors using uni-grams, bi-grams features. Experimental results showed that the Multinomial Naïve Bayes approach is the most accurate in predicting topic polarity.

In the last paper on **“Corpus-Based Techniques for Sentiment Lexicon Generation: A Review”** the authors *Mohammad Darwich, Shahrul Azman Mohd Noah, Nazlia Omar* and *Nurul Aida Osman* stated that sentiment analysis systems rely on a sentiment lexicons. They presented a survey on the most prominent research works that utilize corpus-based techniques for the sentiment lexicon generation.

Thus the research reported in this issue we hope to make a clear impact in the near-future research on digital information management.

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