

# Editorial

## Data mining as a valuable Step in the applied science production

Producing and collecting the data is significantly increased in the world, in the last two decades, so, the volume of information and knowledge has considerably improved. This process requires a complicated process of separation, introducing, accumulation with convenience and speed of use as the main and complete factors that can provide an appropriate basis of science. So the factors such as the use of barcode for commercial products, computer usage for business, Science Technologies, services and informing the public can have significant and meaningful correlation with technology (from collecting data tools, to text scanning and pictures scanning for data processing to remote sensing satellite). It should be noted that public use of web and internet as a global notification system help us to obtain many information. As a result, the need for new technology and automated tools have been increased and the use of intelligent technology can help us to easy access to Information and turning data into knowledge and science.

Data mining can solves this issue and developed the knowledge that is stored in the large databases. Data mining Takes advantage of several scientific fields such as; databases technologies, artificial intelligence, machine learning, neural networks, statistics, pattern recognition, knowledge-based systems, gaining of knowledge, information retrieval, high-speed computing and visual representation

### Data mining in the medical health field

In this field, the mentioned process become popularize by some other sciences such that data extraction from patient records and medical records dataset, could lead to the identification of the disease progression and causes and provided valuable information to the experts in order to identify the causes of the disease, diagnosis, prevention and treatment with regards to environmental factors which enhanced lifetime of the people. The most important available services provided by data mining methods in these fields. EHR (Electronic Health Records) established by data mining in Sarem hospital to access to patient information easily and prevent archive space loss and prevent wrong data entering and also provide basis for related activities, such activities include

- Evaluation of the effectiveness of treatment (Such as assessing the impact of drugs and their side effects)
- Health Management
- Customer relationship management
- Diagnosis and prevention of the disease (such as diagnosis and prevention of the various types of cancer and chronic diseases)
- fraud detection
- medical images analysis
- and
- evidence based medicine.

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