

**L2 : GOMES JOSEPH – MASTER 2 MANAGEMENT AND INTERNATIONAL
BUSINESS NORTH AMERICA**

L1 : SOK SABAYE

BIG DATA ANALYSIS: BUSINESS PROCESS MINING

The document summarized by Sabaye point out difficulties and recent achievements in the field of application in business process management (BPM) improvement and includes a section commenting on how companies balance between speed, quality, and cost efficiency. For that matter, Process Mining (PM) is the methodology applying data from already executed activities to increase the efficiency of the processes. This advanced software adopts advanced techniques like Recurrent Neural Networks (RNNs), long Short Term Memory (LSTM), and Bidirectional LSTM (BLSTM) in connection with the data analysis process and learning from the events that took place in the past for the purpose of predicting future outcomes.

The use of AI (artificial intelligence) ranges from controlling the temperature of ovens on food company sites to checking Internet links according to the number of readers they attract. In the health sector, PM is useful for visualizing and optimizing systems so it helps a lot of lives. The other most important aspect of this document is the responsible use of data, targeting to be fair, transparent, and private (Responsible Data Science, RDS).

However, AI runs into difficulties when it comes to unplanned circumstances, and new ways are being invented to modify business processes.. This includes the Apriori algorithm for data pattern mining, General System Theory (GST) in order to understand some of the different systems, and the use of PM in education to help in planning the time of students. The document underlines the importance of choosing the right Machine learning techniques for specific tasks.