

members in a business are shielded from personal liability for obligations of the entity, which is separate from a separate "person". Thus, because their actions alone is misconduct, the owner's own business will be strongly protected in law if the business does not succeed.

## ARTICLE

where two or more individuals own a business together but have failed to organize a more formalized form of vehicle, they will be treated as a general partnership. The terms of a partnership agreement will govern the partnership agreement if there is no contract and varying by the law of the state or country where the partnership is located. No formal document is required to create a partnership, but a written agreement of the partners will

# Project Report

## CATEGORIZE THE ARTICLE TOPICS



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# Problem:

With a large number of articles and daily news and the increase in the length of articles on websites, Site administrators face difficulty in categorizing the subject of articles, the goal of categorizing articles is to help the administrators of the site to arrange articles in the related sections, and to suggest articles to users by their interests and previous readings.

# Solution:

Use Natural Language Processing (NLP) to categorize the article topics

# DATA DESCRIPTION:

The dataset contains a variety of articles in different Fields, and we collect the data from Kaggle

# Tools:



# Contents:

- Importing the required libraries.
- Importing and Reading the data set.
- Exploratory Data Analysis (EDA)
- Preprocessing:
  - Remove all stop words
  - remove emojis
  - remove all unidecode punctuations
  - remove URLs
- Data Visualizations
- Data Modeling
  - TF-IDF Vectorizer Matrix
  - Latent Semantic Analysis (LSA)
  - Non-Negative Matrix Factorization (NMF)
  - K-Means
  - Latent Dirichlet Allocation (LDA)
  - CorEx
  - Gensim LDA
- Building Recommendations system

# Conclusion:

In this project, We applied several types of NLP models in unsupervised dataset to identify news topics in BBC News dataset, Also we have noticed the diversity of topics from one to another, finally we developed a recommendations system to suggest similar topics to BBC News users.

