Abstract

In the race for survival in an age of technological advancement and overspilling data, organizations are clamoring to use the easily available data for better decision making. The arrival of the next generation of innovative and disruptive technologies has also led to patenting race. Companies are reorienting their business goals and strategies to maintain their competitive edge in the market. Patent data has been an obvious choice for analysis, leading to strategic technology intelligence. The advancement of Machine Learning and access to large amounts of patent data has led to a paradigm shift from traditional patent data analysis, methodologies and approaches to novel procedures. This work aims to weigh the benefits & constraints of these approaches in patent analysis. In doing so, some of the important factors-the so called patent characteristics, cited in literature were identified as impacting the decision on grant duration of patent applications. A comprehensive comparative study of the prediction algorithms was also performed. Finally, a quantitative study of the results is presented. This research is exploratory in nature and to the best of our knowledge, first of its kind in terms of research design and the context i.e analysis of dataset from a developing
country (India) and the techniques used (ML/DL) in patent grant duration prediction.

References

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Index Terms

Computer Science
Information Sciences

Keywords

Business intelligence, data science, machine learning, predictive modelling, predictive model