

Assessing Employee Satisfaction in the Context of Covid-19 Pandemic

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Abstract

The current COVID-19 pandemic crisis brought new challenges for all companies, forcing them to adopt new working methods to avert/minimize infection. Monitoring employee satisfaction is a challenging task, but one that is paramount in the current pandemic crisis. A workable problem-solving methodology has been developed and tested to respond to this challenge that examined the dynamics between Artificial Intelligence, Logic Programming, and Entropy for Knowledge Representation and Reasoning. Such formalism are in line with an Artificial Neural Network approach to computing. The ultimate goal is to assess employees' satisfaction in Water Analysis Laboratories while considering its development and management. The model was trained and tested with real-world data collected through questionnaires. The proposed supervised exercise yielded an overall accuracy of 92.1% and 90.5% for both, training and testing sets.

Keywords: COVID-19 · Human Resources Management · Organizational Performance · Artificial Intelligence · Logic Programming · Entropy · Knowledge Representation and Reasoning · Artificial Neural Networks

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