

# Decision tree tool for auditors' going concern assessment in Spain

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## Abstract-

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The COVID-19 pandemic increased uncertainty about the financial future of many organizations, and regulators alerted auditors to be increasingly skeptical in assessing an entity's ability to continue as a going concern. An auditor's assessment of an entity's ability to continue as a going concern is a matter of significant judgment. This paper proposes to use machine learning to construct a Decision Tree Automated Tool, based on both quantitative financial indicators (e.g., Z-scores) and qualitative factors (e.g., partners' judgment and assessment of industry risk given the pandemic). Considering both quantitative and qualitative factors results in a model that provides additional audit evidence for auditors in their going-concern assessment. An auditing firm in Spain used the model as a supplemental guide, and the model's suggested results were compared to auditors' reports to evaluate its effectiveness and accuracy. The model's predictions were significantly similar to the auditors' assessments, indicating a high level of accuracy, and differences between the model's proposed outcomes and auditors' final conclusions were investigated. This paper also provides insights for regulators on both the use of machine-learning predictive models and additional factors to be considered in future going-concern assessment research.

**Index Terms-** Audit, going concern, machine learning, decision tree, COVID19.

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