

## Content Framework of Creative Accounting Stimuli based on Rapidminer Clustering Technique: Implementation of Hartigan-Wong Algorithm<sup>1</sup>

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### INTRODUCTION

One of the functional areas in accounting knowledge is the invisible and so-called "distorting" functions, which in the clear creative of accounting and financial reporting standards can lead to the contradiction of integrated information of companies at the capital market level (Lao and Song, 2022). This contradiction can be called creative accounting, because it fuels the gap between the representation of capital market companies and stakeholders due to the existence of mysterious information disclosure practices and procedures (Hirota and Union, 2022). In other words, creative accounting is considered a set of methods for categorizing, recording, and disclosing information in the form of financial statements,

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which can lead to more confusion for external decision-makers of companies, along with information asymmetry (Rahman and Geo, 2023). The important point is that considering that creative accounting can be an important factor in the formation of fraud, but despite the emergence of this concept in the early 90s, there is still a lack of a study platform to identify its dimensions and cognitive criteria in accounting science (Saleh and colleagues, 2021). Especially in the structures of inefficient capital markets, which can be a place for the development of this type of accounting as the origin of power holders in companies. With time and with the spread of distortions after the financial crises of the year (2008), creative accounting was given more special attention and was given meaning by a group of professionals in this profession, and the colorful role of misleading motives of this type of accounting procedure in the decisions of investors. The comment was made. Richmannen (2016) in expanding this concept in accounting knowledge stated that when accounting information discloses a subject with some creative methods, it misleads financial decision makers, especially decision makers outside the company, that this subject is a hidden part of distorted realities. that accounting knowledge can hide the negative performance of a company.

#### **METHODOLOTY**

According to the research subject of identification; Categorizing and determining the drivers of creative accounting, it is necessary to use a research method that can simultaneously use the advantages of both quantitative and qualitative methods, i.e. content and descriptive methods. Therefore, the present study, based on the rapid miner clustering technique, seeks to implement the Hartigan-Wong algorithm regarding the identification of creative accounting drivers. In this study, by relying on text mining processes, clusters related to similar research are first created to determine the possibility of determining creative accounting drivers at the functional level of capital market companies. On the other hand, the data collection basis of this study is mixed. In other words, the analysis implementation process of this study has six stages, based on which, four

stages are related to the rapidminer clustering technique, which is used to identify creative accounting drivers, and the fifth and sixth stages of this study are related to fuzzy analysis, which is a set of The processes include credit verification to prioritizing the criteria of the qualitative part of the study.

## **RESULT**

By going through the process of the Hartigan-Wong algorithm to identify the drivers of creative accounting based on the rapid miner clustering technique, this research identified a total of 21 themes for measuring creative accounting to determine which propositional theme is likely at the level of market companies through fuzzy analysis. Capital has a higher impact. Therefore, based on the final weight of each propositional theme, family ownership based on the company structure with the symbol "Y17" is considered the most effective propositional theme of creative accounting, which can direct the functions of capital market companies to a higher probability of distortion.

## **Conclusion**

The purpose of this study is to identify the drivers of creative accounting as a factor in distorting financial statements based on the rapid-miner clustering technique to implement the Hartigan-Wong algorithm. According to the choice of family ownership criterion based on the company structure with the symbol "Y17" as the most effective propositional theme of creative accounting, in the analysis of this result, it should be stated that family ownership has always been faced with presuppositions such as the self-interest of family members over other minority shareholders. It is that the results of past research have presented conflicting results to the scientific community regarding the structural nature of these companies. But this result showed that the structure of family-owned companies, in the capital market, can be considered a more effective factor for the emergence of creative accounting, because these companies usually face fewer

regulatory restrictions in the selection of board members and the appointment of the CEO, and this issue is likely to weaken The functions of corporate governance regarding the protection of the interests of minority shareholders. Therefore, the family ownership structure is probably a strong driver for the emergence of creative accounting at the level of capital market companies.

**Keywords:** Creative Accounting, Rapidminer, Hartigan-Wong Algorithm.

**JEL Classification:** M39, M40.

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