

**PENERAPAN TRANSFORMASI DIGITAL UNTUK
MENDETEKSI FAKTOR PERUBAHAN HARGA SAHAM
PERUSAHAAN TAMBANG INDONESIA**

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ABSTRAK

Indonesia memiliki beragam jenis hasil tambang yang terkandung di perut buminya, mulai dari gas alam, minyak bumi dan batu bara dan juga berbagai jenis sumber daya alam mineral yang terkandung seperti nikel, tembaga, marmer, bauksit, mangan serta kandungan logam mulia seperti emas dan perak. Namun, perusahaan tambang di Indonesia rawan dalam menghadapi berbagai resiko baik internal dan eksternal yang dapat mempengaruhi nilai perusahaan termasuk nilai saham perusahaan tambang. Penelitian ini bertujuan untuk menyusun rancangan *digital assessment* dengan menggunakan *artificial intelligence: expert system*. Sistem ini didesain dengan dihubungkan dengan berbagai database terkait sehingga dapat mendeteksi perkiraan pergerakan harga saham perusahaan tambang dengan adanya berbagai kejadian internal maupun eksternal perusahaan sehingga dapat diajukan solusi untuk menjaga kestabilan harga saham, jika saham diprediksi akan mengalami penurunan. Metode penelitian yang digunakan dalam penelitian ini adalah kualitatif studi literatur. Penelitian ini menghasilkan system digital assessment untuk mendeteksi harga saham serta pilihan solusi untuk menjaga kestabilan harga saham. Proses ditampilkan dengan: *data flow diagram*, *business process diagram*, *entity relationship diagram*, dan contoh laporan hasil prediksi *system digital assessment*.

Kata kunci: Pendeteksian Harga Saham, Peramalan, Artificial Intelligence, Expert System

***APPLICATION OF DIGITAL TRANSFORMATION TO DETECT
FACTORS EFFECTING SHARE MARKET
PRICE IN INDONESIA MINING COMPANY***

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ABSTRACT

Indonesia has various types of mining products contained in its territory, ranging from natural gas, petroleum and coal as well as various types of mineral resources such as nickel, copper, marble, bauxite, manganese as well as precious metal contents such as gold and silver. However, mining companies in Indonesia are prone to face various risks both internal and external that can affect the value of the company including the value of shares of the mining company. This study aims to develop a digital assessment design using artificial intelligence: expert system. This system is designed by connecting with various related databases so that it can detect the estimated movement of mining company stock prices with various internal and external events of the company so that solutions can be proposed to maintain the stability of stock prices, if the stock is predicted to decline. The research method used in this study is qualitative literature study. This research produces a digital assessment system to detect stock prices and the choice of solutions to maintain stock price stability. The process is displayed with: data flow diagrams, business process diagrams, entity relationship diagrams, and sample reports on the prediction results of the digital assessment system.

Key Words: Stock Price Detection, Forecasting, Artificial Intelligence, Expert System