6COSC023W – Final Project Report

D-chaine: Ground level sales analysis and forecasting platform for supply chain domain of SMEs

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Abstract

Sales and raw materials supply forecasting are critical components for any business that deals with inventory management. However, traditional methods of forecasting sales and tracking raw materials availability can be time-consuming, labor-intensive, and prone to error. This is where the power of AI can come into play. An AI-powered solution called "D-chaine" can provide small and medium-scale businesses with the ability to forecast sales and raw materials availability with high accuracy and speed. The system is designed to use machine learning algorithms to analyze large amounts of data, including historical sales data, market trends, customer behavior, and other relevant data points to generate accurate sales forecasts. In addition, D-chaine can also track raw materials availability, which can help businesses optimize their inventory management processes. By monitoring suppliers and their lead times, the system can help businesses ensure that they have sufficient raw materials to meet production demands. One of the key benefits of D-chaine is its ease of use. The system is designed with an intuitive interface that allows even those with limited technical expertise to use it effectively. Additionally, the system is scalable, allowing businesses to expand their use of the system as their needs grow. D-chaine is a powerful tool that can provide small and medium-scale businesses with the ability to forecast sales and track raw materials availability with high accuracy and speed. By leveraging the power of AI, businesses can make better decisions and optimize their inventory management processes, leading to increased efficiency, reduced costs, and improved profitability.