

ABSTRACT

The growth of the modern retail industry demands efficient store layouts to ensure customer convenience and operational effectiveness. Ritel XYZ Purwokerto faces layout issues causing prolonged product search times for customers and significant travel distances for restocking staff, leading to increased operational costs. This study aims to redesign the store layout based on actual sales data to improve customer accessibility and efficiency in product movement. The methods employed include ABC and FSN Analysis to classify products based on sales contribution and movement, and the From-To Chart (FTC) and Activity Relationship Chart (ARC) to analyze product movement patterns and travel distances between shelves during restocking activities. The results indicate that the proposed layout successfully reduced the average staff travel distance from 13,590.77 meters to 7,281.53 meters and decreased Material Handling costs by 46% compared to the existing condition. This research contributes to enhancing operational efficiency and shopping convenience in modern minimarkets.

Keywords: *retail relay layout, ABC analysis, FSN, ARC, From-To Chart, Material Handling.*