

**A GRAPHICAL ANALYSIS FOR MARKET BASKET DATA**

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**ABSTRACT**

Market basket analysis has been an important part of quantitative decision support process in the retail market for many years. The primary objective of market basket analysis is to identify appealing correlated product items from the massive amounts of sales data. The marketing manager can use this information to develop appropriate cross-selling strategies. In this paper, we propose an approach to convert original dataset into a graph based on weight of pair items. The structural organization of the graph suggests that properties of the graph can be used as an alternative way to locate sets of associated products from a large group of transactions.

Keywords: *Market basket, Graph-based Network, Scale-free, hierarchical organization*