

## **A Comparative Study about the Selection of Optimal Locations for Large-scale Supermarkets; Related to Western Province, Sri Lanka.**

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### **Abstract**

Determining where to locate a new supermarket is a critical distinction which taken by the retailer while holding huge financial risk. There is no one best method for supermarket location selection because the location does not have unique characters everywhere. The new locations of large-scale supermarkets tend to locate focusing high residential areas instead of busy town centers. But there can be identified some location failures which retailer hard to get their expected income or location achievements. This condition is significantly identifying in Western Province, than the other regions in Sri Lanka. The problem of this research is ‘how to derive specific criteria or factors in selecting optimal locations to locate a large-scale supermarket; within the Western Province?’. To answer for this problem derived two objectives as; identifying the critical factors which might be applicable in site selection and to value the importance level of each identified factors in both qualitative and quantitative manner.

The optimal location is the place where combining customers’ perceptions and retailer perceptions together. Consequently, the location selection does not come through one specific method and it is a combination of different methods. Under the first objective derived the factors which are applicable for Sri Lankan context by reviewing literature, expert opinions and case-specific applications. The derived factors are concluded into key factors as; the character of the neighbourhood, easy accessibility for customers’, outlet character, competition behaviour, visibility, property cost and legal. The overall importance of each factor was derived by analyzing 79 supermarkets which are located in the Western Province, by using Multilayer Perceptron (MLP) Analysis. In order to check the reliability of derived importance, applied with selected two case studies which have the highest performance (Thalawathugoda) and the lowest performance (Rajagiriya) within the Western Province. The data is comparatively analyzed with open source software of QGIS, google map data by applying raster analysis and comparative maps.

This research attempts to find the importance of each key factor in supermarket site selection related to the Western Province, Sri Lanka. The higher importance factors are indicating the optimal location should have consisted with the higher accessible place for customers with a large residential catchment of the surrounding, without competitors. Ultimately, this research achieved the second objective and found the relationship between, location selection factors and location achievements. The neighbourhood character and customers’ easy accessibility directly relates to the location achievements. The competitor behaviour inversely relates to location achievements. Further, the results of two case studies proved that the new coming

large-scale supermarket structure is workable with high residential areas than the commercial dense areas.

**Key words:** Competition, Customers' accessibility, Neighborhood character, Optimal Locations, Supermarkets