

## Visualization of Quantitative Thresholds in Stocks

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**Abstract :** Technical analysis comprised by various technical indicators is a holistic way of representing price movement of stocks in the market. Various forms of indicators have evolved from the primitive ones in the past decades. There have been many attempts to introduce volume as a major determinant to determine strong patterns in market forecasting. The law of demand defines the relationship between the volume and price. Most of the traders are familiar with the volume game. Including the time dimension to the law of demand provides a different visualization to the theory. While attempting the same, it was found that there are different thresholds in the market for different companies. These thresholds have a significant influence on the price. This article is an attempt in determining the thresholds for companies using the three dimensional graphs for optimizing the portfolios. It also emphasizes on the magnitude of importance of volumes as a key factor for determining of predicting strong price movements, bullish and bearish markets. It uses a comprehensive data set of major companies which form a major chunk of the Indian automotive sector and are thus used as an illustration.

**Keywords :** technical analysis, expert system, law of demand, stocks, portfolio analysis, Indian automotive sector

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