

Taweessin Apiwattanachai 2008: Time-Series Forecasting Models for Automobile Sales in Thailand. Master of Engineering (Engineering Management), Major Field: Engineering Management, Department of Industrial Engineering. Thesis Advisor: Assistant Professor Juta Pichitlamken, Ph.D. 231 pages.

Inventory management at car dealers is generally not efficient because dealers place orders based on their prior sales experiences to ensure that cars will be readily available to customers. If stocks are held at dealers for a long time, especially until the end of model life, it will be difficult to clear out those stocks. Customers are thus offered financial incentives (such as free insurance) which are then subsidized by car manufacturers. To help car dealers to better forecast their sales, a modified Holt-Winter's forecasting model is proposed to estimate customer demand, instead of using just historical sales data. This research evaluates a forecasting model by comparing forecasts (from the Holt-Winter's and our modified model) with actual data.

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