Analytics and Forecasting for Inventory Control

Session organizer: Aris A. Syntetos

Demand forecasting is an integral part of inventory and supply chain optimization. A lot of inventory theory assumes that demand is known. In most practical applications though demand is unknown and needs to be forecasted. We are interested in papers that appreciate this need.

An increasing amount of work has been developed in the area of inventory-forecasting in the recent decades. Examples include contributions on forecasting and bullwhip effect in supply chains, forecasting of slow moving and intermittent demand, the interaction between forecasting accuracy and inventory performance, and the interface between forecasting and demand information sharing. However, and despite these contributions, there are still many unresolved issues for both researchers and practitioners.

The Forecasting Section was introduced in the ISIR in 2008 and since then has attracted some of the most influential contributions in this area. We invite theoretical and/or empirical works that advance the current state of knowledge and offer insights in inventoryforecasting applications. Potential topics include, but are not limited to:

- Forecast methods for inventory optimisation
- Statistical and judgmental demand forecasting
- Forecast accuracy and utility performance measures
- Forecast Support Systems (FSS)
- Forecasting for closed loop supply chains
- Forecasting for additive manufacturing (3DP) enabled supply chains
- Time series modelling for inventory purposes
- Demand and forecast information sharing
- Forecast uncertainty and the bullwhip effect
- Causal forecasting for maintenance and reliability
- Forecasting via temporal and cross sectional aggregation
- Intermittent demand forecasting
- Forecasting for end of life cycle and obsolescence
- Machine learning for inventory forecasting.

If you are interested in joining these sessions, then please do the following.

- You submit your abstract via the web site for the ISIR conference: http://www.isirsymposium When you submit you can denote that you want to join the sessions on **Analytics and Forecasting for Inventory Control**

If you are not sure whether your topic fits, then please send Aris A. Sytetos an abstract based on which the session organizer can form an opinion.

Abstract submission deadline: 31 March 2022

Contact details of the session organizers:

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