Food Supply Chain Optimization: Achieving Cost Effectiveness Using Predictive Analytics

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Abstract : Public Distribution System is a flagship welfare programme of the Government of India with both historical and political significance. Targeted at lower sections of society,it is one of the largest supply chain networks in the world. There has been several studies by academics and planning commission about the effectiveness of the system. Our study focuses on applying predictive analytics to aid the central body to keep track of the problem of breach of service level agreement between the two echelons of food supply chain. Each shop breach is leading to a potential additional inventory carrying cost. Thus, through this study, we aim to show that aided with such analytics, the network can be made more cost effective. The methods we illustrate in this study are applicable to other commercial supply chains as well.