

## Distribution Network Design for E-Retailing Application: A Model Suggestion for Local Retailer in Izmir

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ARTICLE INFO	ABSTRACT
<p><b>Keywords:</b> E-retailing Distribution, supply chain Distribution network Ccross-docking</p> <p>Received 21 April 2020 Revised 30 July 2020 Accepted 18 August 2020</p> <p><b>Article Classification:</b> Research Article</p>	<p><b>Purpose</b> – The rapid development of technology, acceleration of internet with this development and increase of number of electronic devices that connecting to internet brings important changes in all business applications. The retailing sector, connecting businesses and end consumers, has also changed from classical approach, and consumers started to prefer e-retailing channels versus traditional stores. Therefore, businesses, which have to deliver products to those consumers, are also forced to make critical changes in supply chains. On the other hand, businesses that aim to completely change distribution networks in supply chains adopt a strategy called cross-docking to take the lead over competitors and gain cost advantages. Therefore, in this study, aim is to reveal whether a conventional retailer that does not apply e-retailing can gain by using e-retailing application in coordination with cross-docking strategy.</p> <p><b>Design/methodology/approach</b> – In application part, it is emphasized that business, which continues retail activities in conventional way, also uses its stores as cross-docking terminals for e-retailing. For this purpose, a mixed integer programming model has been created and it is aimed to have optimal solution for minimizing number of stores and total cost.</p> <p><b>Findings</b> – In numerical example, it was decided that company which has currently seventeen stores in eleven different regions in Izmir should use nine of these stores as cross docking terminals.</p> <p><b>Discussion</b> – In numerical example, it was decided that company which has currently seventeen stores in eleven different regions in Izmir should use nine of these stores as cross docking terminals.</p>

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