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ABSTRACT BOOK

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Paper-ID: 214

Optimal ordering, pricing, discount policies in a two-party supply chain

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Contributed paper

Keywords: Supply Chain Management

This study develops ordering, pricing, and discount policies in a supply chain that consists of a manufacturer and a retailer. The retailer orders the products from the manufacturer at the beginning of the selling season, and will incur shortage during the selling season, if the ordered quantity falls short of demand; it will incur inventory, if the order quantity exceeds the demand, and will sell the inventory at a discounted price after the selling season. This study analyzes and determines the manufacturer's pricing policy and the retailer's ordering and discount policies in the absence and presence of coordination.

Paper-ID: 1451

Single-Supplier/Multiple-Buyer Supply Chain Coordination with Vertical Information Sharing

KARABATI Selcuk
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Koc University Turkey

Contributed paper

Keywords: Supply Chain Management

We address the coordination problem in a single-supplier/multiple-buyer supply chain with vertical information sharing. The supplier has access to complete information to coordinate the supply chain and desires to implement a coordinated solution. We model buyers_ expectations in line with their limited view of the supply chain under vertical information sharing. These expectations are then incorporated into the modeling of the coordination problem, which results in a more general constrained Stackelberg game. We discuss alternative efficiency sharing mechanisms and propose methods to design the associated discount schemes that take buyers' expectations into account.

MA07, 9:00 – 10:30 **Nefeli B**

Data Envelopment Analysis I (O29)

Chair: PODINOVSKI Victor

Paper-ID: 1556

Exploring the Use of Data Envelopment Analysis for Evaluation in Primary Health Care: An Application to Diabetes Service Delivery

AMADO Carla
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Paper in an organized session

Keywords: Data Envelopment Analysis, Health Care

In this paper, we discuss the development of a conceptual framework for performance assessment in primary health care. This framework aims to establish a link between local needs, resources used, services delivered and outcomes achieved in primary care. In the second part, we discuss the application of this conceptual framework to formatively evaluate a sample of GP surgeries in England in terms of diabetes care delivery. Data Envelopment Analysis was used to measure efficiency, service effectiveness and cost effectiveness. Equity of services utilization was measured as the ratio of services utilized to the local population needs.

Paper-ID: 1031

Performance Measurement in Retailing Organisations Using Data Envelopment Analysis

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Contributed paper

Keywords: Data Envelopment Analysis, Programming, Linear

This study describes an application of DEA to the assessment of operational and commercial efficiency of grocery stores from a major retailer. The operational perspective assesses the sales and income generated at the store. The commercial perspective assesses the sales of individual sections within the store. The effect of environmental variables on store performance, such as the population and the number of competitors in the surrounding area, is also analysed. These models are refined with the inclusion of weight restrictions to reflect accurately the relative importance of the input and output variables on the store performance.

Paper-ID: 943

VRS or FDH: any alternative?

PODINOVSKI Victor
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Paper in an organized session

Keywords: Data Envelopment Analysis

In this paper we suggest an alternative to the extreme assumptions of the VRS and FDH technologies used in performance measurement. The suggested method is based in the notion of selective convexity, which applies when some inputs and outputs satisfy the convexity axiom, and some do not. Production units can be combined only if they are identical with respect to the inputs and outputs that do not satisfy convexity. The VRS and FDH models are the two extreme cases in the suggested range of DEA models. Operationally, these DEA models are solved as mixed integer linear programs.