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STANOVENÍ EFEKTIVITY PŘI NERADIÁLNÍ PROJEKCI V MODELECH DEA
EFFICIENCY ASSESMENT USING NON RADIAL PROJECTION IN DEA MODELS

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Abstract

Data envelopment analysis (DEA) is used as a tool for technical efficiency evaluation of decision making units. These units are compared with each other. The comparison is based on the size of inputs and outputs. In case of an inefficient unit, there is a possible of ordaining necessary changes for achievement of the efficiency frontier. There is a problem when the recommendations for inefficient units given by the classical DEA methods are unrealistic. Modified DEA models (Weighted Slack-based measure of efficiency model; Generic directional distance model) have been developed to eliminate this problem.

Key words: Decision Making Unit**,** data envelopment analysis, efficiency; Weighted Slack-based measure of efficiency model; Generic directional distance model

Abstrakt

Metoda analýzy obalu dat (DEA) slouží k hodnocení technické efektivity produkčních jednotek. Porovnává jednotky mezi sebou, porovnává spotřebované vstupy, vyprodukované výstupy a vyhodnocuje jejich efektivitu. V případě, že je jednotka neefektivní, z výsledků získaných metodami DEA lze určit potřebné změny ve vstupech nebo ve výstupech pro dosažení hranice efektivity. Jedním z problémů při používání klasických DEA metod jsou nereálná doporučení. Proto byly vyvinuty modifikované DEA modely (Weighted Slack-based measure of efficiency model; Generic directional distance model), pomocí nichž lze tento nedostatek vyřešit.

Klíčová slova: metoda analýzy obalu dat; efektivita, Weighted Slack-based measure of efficiency model; Generic directional distance model

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