題目	運用資料包絡分析法與平衡計分卡於紡織業經營績效探討
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摘要	本研究結合資料包絡分析法(data envelopment analysis DEA)及平衡計分卡(balanced scorecard, BSC)，分析紡織產業生產單位之經營績效，並提出改善建議。本研究採用總資產週轉率、市場占有率、存貨週轉率以及用人費用率、作為投入變數，以 Tobins' Q 作為產出變數。資料包絡法分析對紡織企業，在總效率與規模效率分析是相對有效率。MPI 生產力指數平均值大於 1，表示紡織業朝長期最適生產規模前進。平衡計分卡於財務構面資料分析，建議以薄利多銷的方式提高銷貨獲利讓總資產的週轉次數提高。顧客構面可能由於通貨膨脹的影響導致市場萎縮，而使市佔率具未效率運用。產品差異化開拓新的藍海市場，提高市場的佔有率。內部流程分析結果顯示應確立內外部顧客之間在存貨於供應上權衡比重，才不會喪失銷貨機會。學習與成長構面於用人費用率上並無太大的差異，呈現完全效率之結果。研究成果可以作為改善公司投入與產出的生產成本，亦可為紡織業者之決策提供改善方向。
關鍵字	資料包絡分析法、平衡計分卡、紡織產業
Title	Apply Data Envelopment Analysis and Balanced Scorecard to Study the Operational Efficiency of Textile Industry
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Abstract	This study combines (DEA) and balanced scorecard (BSC) to analyze the operating performance of the textile industry. These methods can provide constructive analysis to enhance input and output of the production cost and improve business performance. This study aims to apply the concept of four main constructs relating to BSC to select the most optimized performance-evaluation indicators, as well as use two-stage DEA as the efficiency-measurement method. The constructs adopt in this study include total asset turnover, inventory turnover, cost, market share of chosen and employ persons as input variables. Meanwhile, Tobin's Q is calculated as the output variable. The DEA method is relatively efficient in the analysis of total efficiency and scale efficiency. The average value of the MPI productivity index is greater than 1, indicating that the textile industry is moving towards the long-term optimal production scale. The BSC analyzes the financial data and suggests that the profit from sales should be increased by means of small profits but quick turnover to increase the turnover of total assets. The customer segment may shrink due to the impact of the epidemic, and the market share may be inefficiently utilized. Product differentiation opens new blue ocean markets and increases market share. The results of the internal process analysis show that the trade-off between the internal and external customers should be established between the inventory and the supply, so as not to lose sales opportunities. The learning and growth dimension do not have much difference in the employment cost rate, showing the result of complete efficiency. The combination of the abovementioned further analyzes actual performance-related differences in Taiwan's textile manufacturers.
Keyword	DEA, BSC, Textile Industry