

The Role of Manufacturing Strategies in the Business Performance of Publicly Listed Electronic Chip Manufacturing Firms in Taiwan

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Abstract

This study aimed to determine the factors that contribute to the business performance of the publicly listed Electronic Chips Manufacturing firms in Taiwan. Specifically, this research intends to: characterize the relationship between competitive priorities, manufacturing decisions, capitalization and action plans against business performance; and the combine effects of these four areas to business performance.

A structured questionnaire was used as the primary source of data and the financial data of these electronic firms were taken as secondary data from the Taiwan Stock Exchange. Factor analysis using the principal component method with varimax rotation was applied to extract the key variables. Multiple regression analysis and the Pearson correlation were used identify the factors contributing significantly to business performance.

The findings of the analysis include: 1) increasing process flexibility and lowering defect rate result to an increased performance (current ratio); 2) increasing product flexibility and inventory accuracy also increases performance (operating revenue); 3) inventory accuracy contribute much to the performance (income from operations).

To sum up, the multiple regression full models revealed that only process flexibility and low defect rate have shown significant contribution to the variations in both current and quick ratio. Hence, these two variables, process flexibility and low defect rate decisions are prioritized by the manufacturers that lead to increased performance.