



Annotated Summary of:

Roth, Kendall, and Allen J. Morrison (1992), "Business-Level Competitive Strategy: A Contingency Link to Internalization." *Journal of Management* 18(3): 473–87.

Chapter 5: Multiple Discriminant Analysis and Logistic Regression *Multivariate Data Analysis*, Sixth edition

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This article explores whether organizations use different strategic positioning when confronted with an international context. To support the premise, an analysis of the strategy content for businesses competing strictly domestically is compared to those engaging in both domestic and international activities. This comparison is accomplished using multiple discriminant analysis. The sample consists of 294 respondents from the pulp and paper industry. Of these, 104 are classified as international, that is, at least some of their sales are derived from international activities. The remaining 190 are classified as domestic. The discriminating variables are derived from four strategy dimensions identified in the literature. They are complex innovation, marketing differentiation, breadth, and conservative cost control. Each dimension is comprised of multiple attributes. Overall, 15 competitive attributes are identified as representing the four strategic dimensions. Due to conceptual concerns, these attributes are not aggregated. So that the authors may assess the predictive accuracy of the discriminant function, a holdout sample of 56 randomly selected observations are withheld.

All variables are entered simultaneously, which allows for the determination of the discriminating capability of all 15 competitive attributes. The findings are significant, meaning that the discriminant function effectively differentiates between domestic and international firms. Although the authors do not employ a stepwise procedure, they do attempt to assess each variable's relative discriminant ability. Based on the standardized coefficients, competitive attributes associated with breadth, marketing differentiation, and complex innovation demonstrated a high degree of usefulness in discriminating between the two groups. These include customer service, market breadth, effective control of distribution, and developing brand identification. To assess the discriminant function's ability to predict, the authors construct classification matrices for both the analysis and holdout sample. The overall percentage correctly classified, or the hit ratio, was 81 percent for the analysis sample and 79 percent for the holdout sample, both of which exceed the proportional chance criterion of 54.5 percent. From these measures, the validity of the discriminant model is demonstrated. Based on the findings from the discriminant analysis and subsequent difference testing, the authors conclude that business-level strategy is contingent on the international context.
