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New Product Success and Failure

Factors for New Product Success and Failure in the New Zealand Electronics Industry

A thesis presented in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Product Development at Massey University

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The study identified the factors that influence new product success and failure in the New Zealand electronics industry. Thirty-two factors, which described the nature of the products, the market characteristics, company resources and skills, and product development activities, were analyzed to determine their influences on new product success and failure in the New Zealand electronics industry. Data for the analysis were collected from forty electronics companies, including manufacturers and distributors, in New Zealand by using a mail survey. Each company chose two products that were recently developed or launched, one success and one failure. A total of seventy-five products, forty successes and thirty-five failures, were tested to assess the impacts of the factors.

The survey showed that new product success and failure were significantly influenced by the synergy of market need and product specification. The most important factors in separating new product success and failure were good understanding of buyer behavior, good value for money, made to meet users' needs, less after-sales problems, the customer had great need for product type, and allowed greater pricing flexibility. Market competition including competitors and price competition in the market, the experience of the project team, and a multi-functional development group, showed slight or no differences between new product success and failure.

Group analysis showed that manufacturing companies and distribution companies had different sets of important factors in separating new product success and failure. The manufacturing companies emphasized pricing flexibility and first on the market to new product success and failure, while the distribution companies stressed the importance of technology fitness between the company and the new product, and technical superiority of the new product. Company size affected the new product performance in the company. Small companies were likely to concentrate on providing specific solutions to customers' problems, and large companies relied on sufficient financial and distribution resources to offer customers strong technical support and services.

A series of face-to-face interviews with the new product development practitioners from seventeen New Zealand electronics manufacturing companies assessed their new product
development activities. Most of these companies utilized a formal or semi-formal process for new product development. They focused on providing niche products for export markets, and many of them were very successful in the international environment although they were much smaller than their competitors. They put effort into the up-front stages of the new product development process to make sure the new product concept met customer requirements. Some of them invested more resources in developing and marketing new products, and subcontracted the production of new products. Consequently contract manufacturing companies emerged to meet their requirements. A small number of companies with very compact structures developed new products only in response to the customer’s particular requirements. These companies did not have a formal process of new product development, but they were very flexible and had very close relationships with customers to meet their needs.

The study recommended several suggestions for the New Zealand electronics companies to enhance their ability of successfully developing superior new products to meet customer requirements quickly. They need to apply a well-planned process for new product development, look for suitable niche markets to avoid intense competition, and have an appropriate organizational structure to support effective new product development.
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