Abstract

In recent years, new products are launched into the market on a continual basis. Businesses are under extreme pressure to respond to market competition. Product Development is an important strategic activity that can enhance organizational competitiveness and reduce lead time of product introduction.

This paper presents a study of critical success factors (CSF) of product development in electronic and computer industry based on a survey of 82 Electronics Manufacturing Service Providers (EMS) in Thailand. The critical success factors were synthesized by reviewing literatures and employing the authors' practical experience. Respondents were asked to assess their level of commitment on the CSF's, each of which was classified according to the six stages of product development: feasibility study, concept development, product planning, product and process engineering, market testing, and market launch. Success measures were created by adopting the Balanced Scorecard framework, and the scores were converted into aggregated indexes which were used to distinguish successful and non-successful firms.

The results show that 1) the CSF's indeed have significant contribution in product development success, 2) EMS have several disadvantages in the lack of capable manpower, knowledge, technology, investment and systematic management, and 3) EMS should attempt to improve their management of internal processes. Top management must set a clear strategic plan for the organization to encourage the development of manpower as well as research and development, and establish cooperation among existing players in the same industry.

Keywords: Product development, critical success factors, electronics and computer industries, Electronics Manufacturing Service Providers