ABSTRACT

The purpose of this research was to find out the critical success factors for plastics mechanics supplier selection and to define supplier selection criteria and selection process. The case company is an Electronics Manufacturing Services (EMS) company shifting towards design service model and thus taking full responsibility for supplier selection. The aim was to study the research problems from a standpoint of an independent researcher and bring an objective and theory based view of the current situation and find out development potential in the current operations model.

The research approach of this study was exploratory and inductive. The research data was mainly qualitative and it was collected by numerous interviews, discussions and simple questionnaires from different parts of the organization. The interview results were compared with theory.

The precondition for effective plastics mechanics supplier selection is that the plastics mechanics supplier requirements for each project are defined in detail already in the very beginning of the project. The supplier requirements from design must be at sourcing department’s disposal when defining the suitable sourcing model for a project and suitable selection criteria for suppliers. There is a need to develop a systematic way of defining the organization’s own requirements for plastics mechanics suppliers and to develop a systematic supplier selection process, which guarantees that all the relevant information is used as a basis for the selection decision.

The ever tightening time-to-market requirement for company’s design projects requires that the product design is mature and frozen early in the process. One way to achieve this in the plastics mechanics commodity area is that the volume supplier is involved in the early stages of the project, possibly already at the product design but latest at the new product introduction stage. This guarantees a fluent flow of product information and design feedback from the supplier and enables joint problem solving concerning plastics mechanics design.

The strategy of the company is to rely on virtual integration with the key suppliers and not to integrate itself vertically. This requires that the company selects a suitable number of key partners and develops the relationships towards strategic partnership. A close and well functioning strategic partnership enables the company to achieve the advantages of vertical integration, such as control over key technologies and effective supply chain coordination and to avoid the disadvantages of vertical integration, such as capacity balancing problems and high technology investments.

Key words
Supplier selection, electronics industry, EMS industry, plastics mechanics

Further information