

## THE DOCTORAL RESEARCH ABSTRACTS

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Title: SUPPLIER SELECTION DECISION SUPPORT MODEL: A CASE STUDY OF

GIANT HYPERMARKET IN SELANGOR

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Increased global competitiveness in supply chain foresees the significance of supplier selection with radical changes in decision-making process. Uncertain situation in purchasing, such as supplier selection, makes hypermarket relies on multiple criteria to make decision. Recent approaches of supplier selection implemented by hypermarket are still practicing a traditional decision-making process, using experience and personal judgment to decide on the supplier. Conflict of interest occurred when personal history is influenced by individual decision by decision makers. Hence, there are four types of multi criteria decision-making (MCDM) methods to solve decision problem and one of the decision models under MCDM is analytical hierarchy process (AHP), developed by Saaty (1980), is a tool for decision-making process continuously be the extensively decision-making theory to be employed. AHP has been widely exercised in solving decision problems. However, AHP tools are still lacking in performance and there are issues regarding supplier selection decision-making have been identified. This study introduced a multidisciplinary approach to operational decision support model applied to Giant hypermarket to provide the decision maker with a systematic decision making process. The purpose of new decision support model developed is to contribute new knowledge as well as for the improvement of decision-making methods to the industries, especially key player

industry. This study presents a conceptual framework to summarize the research framework, comprising five main criteria and 41 subcriteria, aligned with this study first research objective, to identify preference criteria for supplier selection decision, making process within the context of supply chain management. This is a quantitative approach study, using questionnaire for data collection methods. Self-administered questionnaires were distributed to 13 procurement managers at 13 stand-alone Giant hypermarkets located in Selangor. Data were analyzed and compared, using three approaches; statistical approach, AHP approach and AHP-SCOR integrated model approach. The final findings indicated that there were three different results shown in each of the three comparative approaches suggested that the new developed model in this study has imperative significant in supplier selection process. The results amplify the most appropriate decision-making, providing the implication of novelty development of new integrated approach. Finally, this study provides practitioners at personal or professional setting to achieve a success of the holistic approach in future decision support model.