The dynamic space allocation problem (DSAP) presented in this paper considers the task of assigning items (resources) to locations during a multi-period planning horizon such that the cost of rearranging the items is minimized. Three tabu search heuristics are presented for this problem. The first heuristic is a simple basic tabu search heuristic. The second heuristic adds diversification and intensification strategies to the first, and the third heuristic is a probabilistic tabu search heuristic. To test the performances of the heuristics, a set of test problems from the literature is used in the analysis. The results show that the tabu search heuristics are efficient techniques for solving the DSAP. More importantly, the proposed tabu search heuristic with diversification/intensification strategies found new best solutions using less computation time for one-half of all the test problems.

**Keywords:** Dynamic Space Allocation Problem; Tabu Search; Probabilistic Tabu Search; Diversification and Intensification Strategies; Metaheuristics;