This study investigated factors that influence outsourcing of non core services in Kenyatta University. There is a knowledge gap as to the factors that drive outsourcing of non core services hence many organizations experience outsourcing failure. The specific objectives were fourfold. The first was to determine the influence of changes in technology on outsourcing of non core services. The second was to examine how competition influences outsourcing of non core services. The third was to determine the relationship between changing consumer preferences and outsourcing of non core services. The fourth was to establish the influence of cost on outsourcing of non core services. This study will benefit academic researchers, policy makers at Kenyatta University, management consultants, stakeholders of Kenyatta University and the staff of Kenyatta University by enhancing their knowledge on outsourcing of non core services. Literature review demystified the concept of outsourcing and discussed reasons why companies outsource, where to outsource? and what functions to source? Other key areas addressed include: major commodities companies outsource, types of outsourcing, forms of outsourcing, outsourcing methodologies, drivers of outsourcing, current trends in outsourcing, benefits of outsourcing, set backs of outsourcing and how to avoid pitfalls of outsourcing, conceptual framework and summary of the literature review and research gaps. This study adopted a descriptive approach. The target population of the study was 30 heads of all functional departments of Kenyatta University. A census of all the departments was undertaken and all the heads of these departments were purposively selected for the study. Data was collected through questionnaires which were be administered personally by the researcher. Out of the 30 questionnaires issued, 27 of them were duly filled and returned. Statistical Package for Social Sciences (SPSS) was used to analyze the data. Descriptive statistics which includes measures of central tendency was used to relate and analyze the data. Data was presented using frequency tables, percentages and pie charts. The summary and conclusion of findings on factors influencing outsourcing of non core services is presented with regard to: changes in technology, competition, changing consumer preferences and cost. In the light of these findings and consistent with the objectives of this study a number of recommendations have been highlighted among them being the need to review the outsourcing policy at Kenyatta University. Suggestions for further research were made as follows: factors influencing outsourcing of non core services in other public universities and a comparative study in a profit making organization.