The purpose of this study was to examine the challenges influencing strategic planning in technical training institutes in Kenya with special reference to technical training institute in Nairobi. The researcher intended to determine which the key strategic issues are in strategic planning and how they affect strategic planning practice in technical training institute in Nairobi. The researcher also sought to determine the influences of education legislation in Kenya on strategic planning. The study will also examined what role funds and government support play in both the process of strategic planning and implementation in TTI's in Nairobi and how effective this has been in the process of Strategic Planning for Technical Training Institutes in Nairobi. In carrying out this research, the researcher adopted a descriptive survey approach which will provided a picture of the current state of affairs as regards strategic planning processes in TII's in Nairobi. Although the accessible population comprised of 230 registered Technical Training Institutes in Nairobi, the research was based on the 4 government Technical Training Institute in Nairobi which had been involved in Strategic Planning and where government role in funding and supervision has been experienced. Out of this four, a sample population from the members of Board, heads of departments and other members of the administration were picked through random sampling. Data was collected from the target population by use of a questionnaire which was sent to prospective respondents. Interviewing method was used to gauge the level of the respondents' participation in Strategic Planning process during the process of present the questionnaires. Once data was collected, the researcher used frequency tables, measures of central tendency and percentages and used charts (histograms) and bar graphs to help interpret the findings. From the research, the following findings were made; that the key strategic issues that were considered were SWOT analysis PESTLE analysis and determination of vision and mission. It was also found that the education Act was the most fundamental document used in strategic planning. The researcher further found that training was given through consultants and that because finding was a key shortfall in the government should set a vote head for the strategic plan process. The conclusions of the research were that the publics of the colleges should be able to familiarize themselves with vision and mission and consult the education act in the process. Further training and sensitization of staff should be enhanced before the process of preparing the strategic plan and that government support should be really put in place through training and funding. The following recommendations were made from the study that strategic plans should be easier to read and recall that educational documents should be harmonised to achieve desired policies and that training centres should be established to facilitate this. A special vote for the same should be established. The researcher suggested that further studies be carried out on strategic planning in universities and the challenges in implementation process of strategic plans in TII's be done.