Market volatility, corporate irregularities and troubled capital market have shaken the banking industry and highlighted the dangers of poor risk management. Traditional risk systems can't capture the inter-relationships between various risk types across geographies, departments and lines of business. The new Basel Capital Accord is creating systems for banks to improve their risk management practices. The accord demands the banks globally to retain a certain amount capital as a hedge against loan defaults, it formulizes the probability of losses in certain loan markets and calculates the amount of retained capital a bank has to have in reserve. In 2005, the Central Bank of Kenya as the regulatory authority defined a road map to adopting Basel II. This study therefore, specifically explored the challenges that affect implementation of Basel II Capital Accord in Kenya. Findings from this study will be useful to commercial banks as they adopt the accord in order to institute quality Risk Management framework and enhance competitive advantage. Supervisory agents may find them useful in assessing the success of the Basel II practice. The study applied a descriptive survey research design and the study population constituted of 42 respondents from 42 bank institutions within Nairobi. The study applied a census approach to gather information from all the respondents in the target population. Questionnaires were used as the main data collection instruments and they were issued to all the respondents in the 42 banks. The gathered data was subjected to quantitative and qualitative analysis and tables and charts were used to present the study findings. This assisted in answering of the research questions, drawing the study conclusion and making the study recommendations. The survey revealed that there is a high level of awareness in banking institutions on the importance of employing systematic methods of identifying, analysing and controlling/mitigating risks. However, few institutions have committed resources to build capacity on risk management, generate effective reports, apply risk management tools, and ensure independent review of their risk management functions. Most of the respondents stated cost to be the most critical challenge that barred the bank from effectively implementing Basel II Accord. Capacity building, legislation and complexity were also stated as Basel II implementation challenges which had a long term negative impact on risk management functions. The study recommended that all institutions move towards establishing dedicated risk Management management functions headed by an overall risk manager, set aside specific budgetary allocation to fund risk management activities, upscale their human resource base and upgrade existing IT systems. Further study is recommended to find out the impact of Basel II in Kenya Banking systems as a result of changes in which banks conduct businesses. Most importantly, the impact it will have on market segments, pricing, product offering and internal impact on the banks in form of increased cost, decision making and capital management.