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CHANGING THE PARADIGM OF DEVELOPING COUNTRIES SPACE PROGRAM: LEAN
SATELLITE PROJECT AS A PRAGMATIC OPTION

Abstract

Several developing countries have made maiden steps in the establishment of space programs through some forms of cross boarder collaborative satellite development projects, launch and operations efforts but in several of these cases such effort cannot be sustained due to several constraints. New entrants from developing countries with little or no expertise in space technology have been able to access space by exploring the benefits of the explosive growth in satellite industry through the use of small satellites launched with more innovative applications. Several of the new entrants in space industry are filling several technological need gaps by employing the concept of untraditional risk taking approach to achieve low satellite mission cost and fast delivery, i.e., lean satellite. Sustaining space program effort can only be achieved by institutionalizing space program through cost effective strategic road map for human capacity development and establishment of localized space policy. This paper shall peruse the present situation of space technology in developing countries and why these strategies are not sustainable and enumerates the lean satellite project concept as a long-term sustainable space technology development concept for developing countries especially citing several case studies of such projects.