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FORESIGHT FOR ENHANCING THE MEXICAN SPACE SECTOR: CRITICAL UNCERTAINTIES,
SCENARIOS, AND PUBLIC-PRIVATE PARTNERSHIPS

Abstract

In the Space Industry, Foresight is crucial during rapid technological change. The current pace of development and the convergence of societal, economic, environmental, and political drivers with technological progress creates a landscape of volatility, uncertainty, complexity, and ambiguity (VUCA). Proactive strategic planning is crucial to address emerging challenges and opportunities in the rapidly changing world. This study uses Futures Thinking and Strategic Foresight to analyze the Mexican space industry and identify uncertainties in strategic planning. As a key player in the emerging space countries of Latin America, Mexico faces unique challenges and opportunities in developing its space industry. We aim to understand the future of the Mexican space sector for informed decisions on growth opportunities and public-private partnerships.

The methodology entails a comprehensive approach to examining the future of Mexico's space sector from 2030 to 2040. It begins with extensive research to identify future issues and driving forces, encompassing technological, economic, political, environmental, and social factors. This research forms the foundation for a collaborative workshop involving experts from government, academia, and industry within Mexico's space sector. During the workshop, participants assess the potential impact and uncertainty of critical issues, prioritize them based on predefined criteria, and define three critical uncertainties with high impact and uncertainty. These uncertainties serve as the framework for developing plausible scenarios for the future of Mexico's space sector. Small groups work to outline each scenario's unique features and implications, fostering discussions on opportunities, challenges, and recommendations for policies, programs, and technologies relevant to the sector. The ultimate goal is to provide strategic insights and recommendations that will aid in developing robust strategies to address the future challenges and opportunities facing Mexico's space sector.

This paper presents the findings of a study and workshop that aimed to explore the potential of public-private partnerships (PPPs) in driving innovation and growth in the Mexican space sector. A team of experts collaborated to identify key future issues and driving forces, assess their impact and uncertainty, and develop plausible scenarios for the future. The workshop outcomes provide valuable insights for stakeholders interested in promoting PPPs in the Mexican space sector, offering a roadmap for future collaborations and investments. This paper explains the workshop's methodology and presents the scenario outcomes and recommendations for enhancing PPPs in the Mexican space sector, serving as a reference for Latin America and the international emerging space sector.