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FUTURES THINKING: A MINDSET FOR ADDRESSING NEWSPACE'S BIGGEST CHALLENGES

Abstract

The 21st century will be marked by every person on Earth recognizing their position as a stakeholder in our collective off-planet activities. While stakeholder awareness is expanding, influence and decision making is still consolidated. This major shift is happening in a landscape of accelerated change in which societal, economic, environmental, and political drivers collide with technological advancements to create new challenges. Furthermore, these transformations are exponentially increasing in ever-shorter intervals of time. Experts across disciplines have adopted an acronym for the current business environment coined by the U.S. military to describe chaotic situations: VUCA, which stands for volatility, uncertainty, complexity, and ambiguity. Leading organizations in these volatile and complex times require new approaches and mindsets. To gain better visibility while making decisions that will impact our shared future, an instrument for building resilience, adaptability and opportunity through recognition of emerging is needed. For this, Futures Thinking is the instrument for which Strategic Foresight provides the framework. In recent years, there have been efforts in the space community to use the mindset of Futures Thinking to frame windows for the possibilities of the future; however, there is room to expand this impact by also applying Strategic Foresight to allow us to mine the external environment for trends and leverage those insights to create maps of the emerging landscape. These well-informed maps of the future allow us to test our current strategy, develop breakthrough innovations, and create transformative change. Strategic Foresight is not about predicting the future, living in the future, or speculating. It is about making informed and intentional choices today based on the likelihood of potential outcomes. We cannot predict the future, but we can plan and use the process of building the future to draw many representative voices to the table, surfacing risks and opportunities. This paper will address the opportunities and risks of applying Futures Thinking to space activities for military, exploration, and commercial purposes. We will review the long history of applying Futures Thinking in these contexts, especially the military. Finally, we will demonstrate why this moment in space exploration, geopolitical realignment, and economic development calls for a mindset of strategic foresight more than ever.