## BUSINESS INNOVATION SYMPOSIUM (E6) New Space Markets + Investment Opportunities (3)

Author: Mr. William Pomerantz Virgin Galactic L.L.C, United States

Ms. Tiffany Montague
United States
Ms. Nicole Jordan
X PRIZE Foundation, United States
Ms. Amanda Stiles
SpaceX, United States
Ms. Chanda Gonzales
X PRIZE Foundation, United States

## EXPANDING OUR SPHERE OF ECONOMIC INFLUENCE TO THE MOON

## Abstract

In the past two centuries, with the majority of the surface of our planet already explored, civilizations around the globe have striven to expand the sphere of human economic influence upward. This trend began with the first skyscrapers of the 1880 and has continued through the birth of commercial aviation and commercial satellites, each of which drives hundreds of millions of US Dollars in annual economy, as well as infrastructure vital to the modern way of life. Although some contend that with geostationary satellites in orbit 36,000 km above sea level our economic sphere has reached its maximum state, there exist compelling reasons to believe this is not the case, and in the near future—rather than science fiction inspired dream—we will see commercial activities expanding out into cis-lunar space and beyond.

One immediate financial incentive for deep space commercial activity already exists. The Google Lunar X PRIZE, announced in September of 2007, offers a total of US\$30 Million in prizes to the first privately funded teams to successfully explore the surface of the Moon with a robotic spacecraft. This completion has helped spur more than twenty teams from a dozen nations to put forth an effort at a commercial lunar venture. But in all likelihood, the success of the Google Lunar X PRIZE as an endeavor relies on the ability of the competing teams to identify markets beyond the prize purse. Historically, teams competing for incentive prizes have spent multiples of the prize purse rather than fractions of the prize purse in their efforts to claim the prize; their willingness to so has always been rewarded by a leadership position in an new market or market niche.

This paper will examine the new markets and market niches that may exist for commercial services on and near the Moon, with a focus on the near (0-10 years) and intermediate (10-25 years) timeframe.