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Contribution of Space Activities to Solving Global Societal Issues (2)

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DESIGNING A MOON VILLAGE FOR ALL HUMANITY

Abstract

With the International Space Station approaching the end of its life-cycle we are at a critical tipping point for Human Space Exploration. Several nations and private companies are planning independent programs that target the Moon in the near and mid-term, providing us with the opportunity to engage new stakeholders under a shared and peaceful vision. At a moment in history that's likely to be remembered for its alarming divisiveness, the space community has the unique opportunity to coordinate efforts to create a powerful symbol of unity - a partnership wider and stronger than the International Space Station.

Even as corporations turn their eyes upwards, space grows ever more accessible to the space enthusiast—through the reach of their DIY instruments, experiments, sensors and cubesats, and soon through space tourism. In the next decade, space will be hackable. Space will be playful. The Moon Village will unfold in the context of a truly unique open architecture governance scheme and has the potential to become an innovation platform and research network for the 21st century. Moreover the Moon Village governance might create powerful innovations useful back on Earth. What if working towards this goal can help us rethink all the systems we are part of today? What if we approach the Moon Village as a way of experimenting with and prototyping international collaboration methods, consensus building, finance, and creativity?

These new challenges and opportunities require a way of thinking and doing; one that breaks down the barriers dividing the disciplines and facilitating the sharing of expertise between a global community. Our challenge: how can we collectively prepare for novel, low-cost and agile programs for space settlement and allow for space agencies, donors, citizens and commercial space to create an integrated, mutually reinforcing strategy?

Complex system innovations like the Moon Village initiative often encounter stiff resistance from intended beneficiaries and stakeholders, because they disrupt existing behaviors, organizational structures, and business models. This mission requires more than just executing a checklist - it requires us to bring the Moon Village vision to life, by designing tools, conversations, experiences, and opportunities to bring together leaders from inside and outside of the space sector. In fact, with very complex systems like international space missions we argue that the design of their "intervention"—their introduction and integration into the status quo and the acceptance by the stakeholders—is even more critical to success than the design of the technical artifacts