

Interview

Fostering Innovation Through Competition

An Interview with Peter H. Diamandis, M.D.,
 Founder, Chairman, and Chief Executive Officer, X PRIZE Foundation



Peter H. Diamandis

EDITORS' NOTE In addition to his current post, Peter Diamandis serves as the CEO of Zero Gravity Corporation and is the Chairman and Co-Founder of the Rocket Racing League. He is also a Co-Founder and Director of Space Adventures. In 1987, Diamandis co-founded the International Space University (ISU) where he served as the university's first Managing Director. Today, he serves as a trustee of the \$30M ISU based in Strasbourg, France. Prior to ISU, Diamandis served as Chairman of Students for the Exploration and Development of Space, an organization he founded at MIT in 1980. Diamandis received his undergraduate degree in molecular genetics and graduate degree in aerospace engineering from MIT. He received his M.D. from Harvard Medical School. In 2005, he was also awarded an honorary Doctorate from the International Space University.

ORGANIZATION BRIEF Widely recognized as the leader in fostering innovation through competition, the X PRIZE Foundation (www.xprize.org) is an educational nonprofit prize institute focused on creating radical breakthroughs for the benefit of humanity. In 2004, the foundation captured world headlines when Burt Rutan, backed by Microsoft co-founder Paul Allen, built and flew the world's first private vehicle into space to win the \$10-million Ansari X PRIZE.

How has the X PRIZE Foundation evolved and what role does it play today?

The X PRIZE Foundation started in the

mid-'90s as a mechanism to help me fulfill a dream since childhood, which is to fly into space. I read that Lindbergh had flown across the Atlantic in 1927 to win a \$25,000 prize, and the idea that a prize could inspire a new generation of private spaceships was impactful to me. We launched the \$10-million Ansari X PRIZE and attracted 26 teams from seven countries around the world who spent \$100 million in total. In October 2004, Burt Rutan's vehicle SpaceShipOne made its second flight into space within a two-week period and won the Ansari X PRIZE.

So on the heels of the successful Ansari X PRIZE, we decided to keep the X PRIZE going as a nonprofit organization that looks at using incentive prizes to drive breakthroughs in different areas. Today, we offer prizes in four areas: energy and environment, where Cisco is one of our partners; life sciences; exploration, which is space and underwater; and education and global development.

How did you develop those four areas of focus?

We chose four areas of focus that we are excited about giving prizes in, where our current benefactors are interested in prizes, and where we think there are market failures where prizes can be helpful – they may change over time. We're starting to look at prizes in aviation and robotics as well.

We get our prize ideas from a number of different areas. We're about 50 people at the X PRIZE Foundation, and we have a group who are passionate about breakthroughs and driving innovation. We have an incredible board of trustees – people like Larry Page, one of Google's co-founders. We also have an outside group of our major benefactors – what we call our vision circle members, which includes the other Google co-founder, Sergey Brin. They have contributed significant amounts for us to develop and launch prizes in areas that are of interest.

We meet twice a year with our board of trustees, our vision circle members, and our outside advisors, and we debate and discuss where there are market failures and where a prize would be transformative. We are launching one X PRIZE per year and four or so X CHALLENGES.

An X PRIZE is \$10-million or larger, typically for a global competition where you're changing the way people think about a large industry or creating an industry; it's around three to eight years for these X PRIZES to be won.

X CHALLENGES are typically \$1 or \$2 million and more about a technology demonstration. The first X CHALLENGE we ran was with NASA

called the Northrop Grumman Lunar Lander X CHALLENGE for a vertical take-off/vertical landing rocket-powered vehicle. We'll be launching more of those. We're looking for cool, exciting things that capture the minds, the imagination, the time, and the capital of people on the planet.

Do you foresee strong opportunities to develop in new markets?

Absolutely. Our teams that compete for our competitions are from around the planet. Through a partnership with Ratan Tata, (Chairman of Tata Industries) we're focused on building X PRIZE India. We have a number of graduate-level X PRIZE labs, one at MIT, as well as at USC and the University of Washington in Seattle, and we are launching one this year in IIT Bombay. These university labs help us generate X PRIZE ideas.

There is great interest throughout Asia, the Middle East, and Europe. In India, in particular, we're going to focus on where the X PRIZES can be of interest to the developing world around things like clean water, energy scarcity, health care, and pandemics – areas that would meet the needs of billions of people.

How did your partnership with BT come about, and how critical have they been to the success of X PRIZE?

BT has been a great partner across the foundation. They have been underwriting us to think about where we should be doing X PRIZES and have also helped us go global. I have traveled with senior BT folks to Singapore, India, and throughout Europe, and we have had a series of innovation academies with them where we talk about what it takes to drive innovation. Michael Boustridge (CEO, North America) also joined our board of trustees.

There is much debate over the U.S. losing its edge to emerging countries in regard to innovation. Are you concerned that the U.S. is losing its leadership position?

We need to be concerned that, as we become risk-averse as a society, our ability to drive true breakthroughs will diminish. The U.S. is still the leader. We still have the mindset, the capital, and amazing innovators that people want to emulate. But we're not guaranteed that in the future. We have to be careful about where regulation holds us back. The whole scenario around stem cells was a scary period of time, because what the U.S. government needs to recognize is that if we block an area of research here, it means we're going to lose that area of research going forward and it's going to go somewhere else. ●