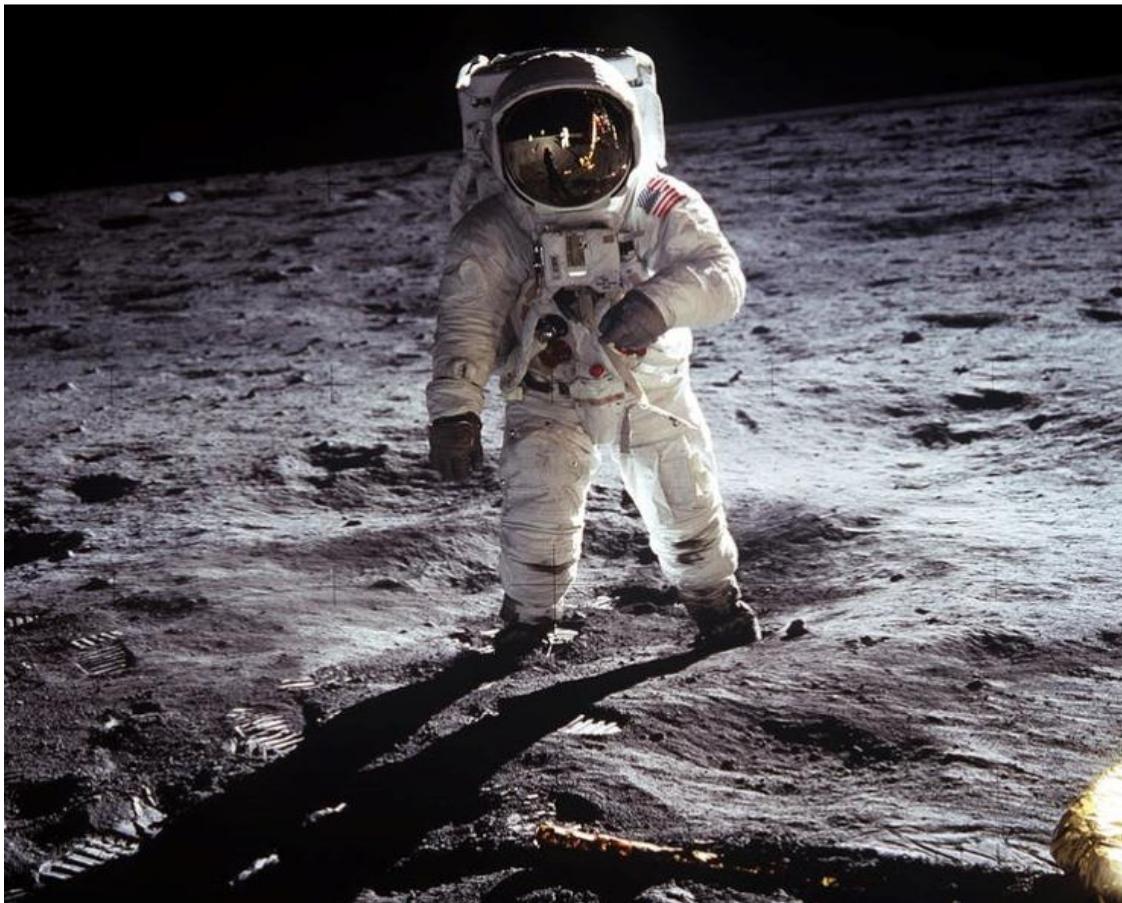


# Fly me to the moon

ProShare Newsletter – July 2019



There is a second space race underway – surpassing even the lofty goals of the US Government-funded Apollo programme of the 1960s. Unlike the days of Apollo, lunar exploration is now increasingly being driven by private commercial firms, either independently or via NASA contracts (Boeing Space and Lockheed Martin, to name but two contractors). The highest profile independent runners and riders in the new space race are as follows:

**SpaceX** – founded by Elon Musk (Tesla founder-CEO – no cash pay, ‘only’ a potential \$55billion in stock options), describes itself as a company that aims ‘...to revolutionize space technology, with the ultimate goal of enabling people to live on other planets’;

**Blue Origin** – Jeff Bezos (Amazon founder and owner of The Washington Post): ‘Blue’s vision is a future where millions of people are living and working in space. In order to preserve Earth, our home, for our grandchildren’s grandchildren, we must go to space to tap its unlimited resources and energy’; and

**Virgin Galactic** – Sir Richard Branson (Virgin Group founder) ‘Virgin Galactic recognizes that the answers to many of the challenges we face in sustaining life on our beautiful but fragile planet, lie in making better use of space’.

All of these companies are chaired by or have CEOs who are white, male billionaires, and all are privately held.

Would this even be happening now if the global financial crisis of 2008 had somehow been averted, with its subsequent prolonged near-zero interest rate environment, quantitative easing and political focus on regulation – effectively creating the ideal conditions for privately funded tech-sector companies to grow so rapidly through countless funding rounds without having to even contemplate the messy, expensive business of an IPO?

There is undoubtedly a fascination with space, its otherness and its mystery to the vast majority of us, who in our lifetimes will neither become astronauts nor billionaires capable of affording space tourism. Unsurprisingly, it is near-impossible to fail to be captivated by the audacity of ambition of the men behind these companies.

Their fixity of purpose, the deep technical expertise and talent of their employees, the even deeper pockets of their investors – all are clear requirements for their missions. But what else is required? What are we missing? The common theme of these companies' mission statements or BHAGs ('Big Hairy Audacious Goals' in common HR-parlance) is to improve life on Earth. How? And for whom, exactly?

Political support is essential if any of these commercial operators, and their many smaller competitors, are to make good on their missions, if not their investors' financial goals. But our Earth-bound politicians' priorities shift with the wind and the ability of companies to build fast enough to avoid project cancellations is essential, which in turn drives shorter and more frequent funding cycles. In June 2017 the current Trump administration cancelled a 2010 Obama-initiated programme to develop an asteroid redirection system. Now busily pitching for a second term in office in the US, in March 2019 Vice President Pence set a new 2024 deadline for a human landing on the Moon – eager for the political kudos of being seen to support such an inspirational achievement. Timing is everything, it seems. NASA is under pressure to deliver for its political masters and is reckoned to increasingly favour shifting the attendant risk (and cost) onto the private space sector.

Many of us will recall watching the Soyuz capsule re-enter Earth's atmosphere on 18 June 2016, containing the British astronaut Tim Peake, returning from six months in space on the International Space Station (effectively a world-class laboratory, orbiting our planet 250 miles up) – myself and my now space-obsessed six-year-old son included. And I'm old enough to remember Helen Sharman being the first British astronaut, and female, to visit the Russian Mir space station in the early 1990s.

The pure ability of space, and of those lucky few humans who experience it first-hand, to bewitch and inspire us all will certainly endure. The eventual winner of the commercial space race will be significant, and will have far-reaching consequences for all of us, invested as we are, in this planet.

Will this mean that we see commercially successful space tourism firms eventually listing? If we think tech IPOs are overhyped now, what on earth (no pun intended) will accompany the first opportunity for public investment in a company that can literally fly you to the moon? What sort of performance metrics would you set for their share plans when the sky itself is no longer the limit?