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## 2024 SPECIAL ISSUE

## *Building Business Resilience and Sustainability*

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Victor S. Sohmen, Co-Editor
Denise V. Siegfeldt, Co-Editor
Marvin Ludlum, Co-Editor

***Global Journal of Entrepreneurship***
(Special Issue)

Special recognition is provided for Dr. Victor S. Sohmen, the Editor of the *Global Journal of Entrepreneurship* (GJE), whose extraordinary dedication and enormous energy, encouragement, and relentless pursuit of perfected peer-reviewed articles for this Special Issue of the GJE kept things moving on a steady path. Dr. Denise V. Siegfeldt, the Associate Editor of the GJE, is hereby recognized for her sustained efforts in completing the final reviews meticulously, and in grading the selected articles with competence. We also wish to acknowledge Dr. Marvin Ludlum, the Co-Editor ot the GJE, whose alacrity and attention to detail served as a system of checks and balances to help maintain the integrity of this Special Issue.

Jeff Mankin, President
**Institute for Global Business Research**

# INTRODUCTION

This 2024 Special Issue of the *Global Journal of Entrepreneurship* comprises scholarly articles on *building business resilience and sustainability* for entrepreneurship under the prevailing COVID-19 pandemic environment. The twelve topical articles selected for this publication provide a diversity of pointers for entrepreneurs to avail of windows of opportunity, adapt to a rapidly changing scenario, and optimize limited resources under these challenging conditions. As the economic, societal, business, and political systems in which we live are in a state of flux, entrepreneurship is vital, resilience is critical, and sustainability has become an imperative watchword to secure the future.

In the opening article, Yu-Feng Lee revisits Hofstede's culture paradigm to demonstrate that cultural aspects of nations and regions have impacted responses to the pandemic and suggests ways for businesses and communities to tailor their responses constructively by adapting to cultural realities. Next, William Casey looks at the impact of the COVID-19 pandemic on globalization and foreign direct investment (FDI) flows, and how these twin challenges can be tackled for a sustainable future. Robert Fleming explores small-business resilience and customer retention during these uncertain times when spatial distance is introduced between the business and customer due to the contagion of the pandemic. Robert Lahm takes a panoramic view of the entrepreneurial landscape to advise on coping with the constraints presented by the COVID-19 pandemic. To underscore the need for resilience, Jonathan Reed explains how strategic agility can be gainfully leveraged to combat the turbulent environment around us. The Bresslers recognize the stress precipitated by the pandemic and suggest that entrepreneurs challenged by psychological disorders—such as narcissism, attention deficiency, and dyslexia—have a fighting chance of success if they could marshal the positive traits intrinsic to their maladies to overcome obstacles.

Dennis Zocco looks at the financial aspects of commercial lease renegotiation strategies of small businesses for post-pandemic cash flow sustainability and risk mitigation. Stephen Childers and Andrea Stanaland consider how to preserve and sustain innovation and to promote "workplace collisions" in the absence of face-to-face interactions during the pandemic. Brooke Envick provides a continuity template that can be applied to small businesses as a strategic design tool to sustain recurring revenue during times of crisis. Ellen Raineri and Victor Sohmen embark on an empirical study of how socially responsible crowdsourcing can be included in entrepreneurship curricula and invigorate small businesses by tapping into external sources of information to adapt appropriately to a changing scenario. Carlos Aimar and D. K. Smith revisit the popular VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) framework as a management tool for dealing with the kaleidoscopic pandemic environment. In the final article, Murat Arik, Jessikah Riley, Azizakhon Mirsaidova, and Mariyam Sumaiya empirically explore and analyze family businesses to identify frustrations, and threats to their survival.

The mosaic of articles presented in this Special Issue should serve as food for thought, as triggers for critical analysis, and as springboards for further research into the multiple challenges presented by the fluid and evolving pandemic environment. Through identifying needs, seeking alternatives, taking actionable decisions, and continuing the search for viable solutions, we can look forward to adopting multi-pronged and resilient approaches toward a sustainable future through critically informed entrepreneurship in crisis situations—now, and well into the future.

# SUSTAINABLE ENTREPRENEURSHIP: SPACEX PAVING THE WAY TO MAKING LIFE MULTIPLANETARY

**Ahmed Maamoun, University of Minnesota Duluth**


## ABSTRACT

*To say Elon Musk is a disrupter is quite an understatement. The self-made billionaire has transformed several industries (Electric Vehicles, financial services, space travel, hyperloops, artificial intelligence, etc.). He is also a charismatic marketing genius who is able to create buzz and excitement whenever he speaks or tweets. Privately funded space exploration startups, such as Elon Musk's SpaceX and Jeff Bezos's Blue Origin, have made giant strides in efforts to send humans to other planets. However, both companies built expendable launch vehicles (ELVs) that are used only once. Typically, the rocket has been the most expensive component in the preparation of a space trip. It consists of tremendous amounts of alloys, metals, plastics, minerals, conductors, pollutants; that are essentially used once. The environmental costs are substantial. Musk and SpaceX's R&D team had been working on developing a reusable rocket, Falcon 9, to reduce the cost of spaceflights and minimize environmental damages. The rocket is a new-to-the-market product exemplifying disruptive technology. For a price, SpaceX was planning on taking civilians to outer space, the moon, and even Mars. SpaceX went through six of the seven steps in the new-product development process (idea generation, idea screening, concept development and testing, business analysis, product development, test marketing).*

*The Falcon 9 market testing phase was completed in 2023; and product launch (commercialization) was set for 2024. The stakes couldn't be higher. The new product, Falcon 9, could not only determine the future of the company but possibly that of the entire space tourism and travel industry. The paper utilizes two marketing concepts (Diffusion of Innovation and Product Life Cycle) to predict the prospects of SpaceX and the space industry as a whole. The paper also strives to explain how innovation can give a company a first-mover's advantage and shape the viability of a new industry.*


Keywords: Innovation, Entrepreneurship, First-Mover Advantage, New Product Development, Product Life Cycle, Sustainability.

## INTRODUCTION

The South African-Canadian-American entrepreneur, Elon Musk, is best known for his cosmic imagination and risk-taking drive to bring about a more high-tech world. Musk has an impressive resume and a knack for founding avant-garde companies, with SpaceX as the crown jewel. He is promising to get rid of internal combustion engines and fossil fuels. He is promising 100% self-driving cars with zero emissions. He is promising hyperloops below Earth and colonies on Mars. Fortunately, he has the passion and the money to make it happen. Known for the companies he has founded or developed including PayPal, Tesla, and SpaceX, Elon Musk has had a gigantic impact on multiple industries and is poised to have a major influence on the space industry in particular (Vance, 2020). It is safe to say that the self-made billionaire is striving to revolutionize mobility both on Earth and in space, and has become the world's richest person in the process. Musk is the world's wealthiest entrepreneur with a net worth of $250 billion (Forbes, 2023).

Musk and his R&D teams worked diligently to put new products on the market. They went through the new-product development (NPD) process on a daily basis. The reusable rocket, Falcon 9, is a classic example of how an entrepreneur can utilize the NPD process to create a sustainable product that transforms an entire industry (Musk, 2017).

## SUSTAINABLE ENTREPRENEURSHIP

Sustainable entrepreneurship, also known as green or eco-entrepreneurship, refers to the practice of starting and growing a business that focuses on addressing social and environmental issues without negating the drive for profit. The goal of sustainable entrepreneurship is to create a positive impact on the planet, society, and the economy by integrating principles of sustainability into business operations.

Key features of sustainable entrepreneurship include (Elliott, 2022):

Triple Bottom Line: Sustainable entrepreneurs aim to achieve a triple bottom line, which considers not only financial success but also social and environmental outcomes. This is often summarized as "people, planet, and profit."

Environmental Responsibility: Sustainable entrepreneurs prioritize environmental sustainability by adopting eco-friendly practices, reducing resource consumption, minimizing waste, and promoting conservation.

Social Impact: In addition to environmental considerations, sustainable entrepreneurship emphasizes social responsibility. This may involve creating products or services that address social challenges, improving working conditions, or contributing to local communities.

Innovation: Sustainable entrepreneurs often seek innovative solutions to address social and environmental issues. This could involve developing new technologies, business models, or products that have a positive impact.

Ethical Supply Chains: Ensuring that the entire supply chain is ethically managed is a common practice in sustainable entrepreneurship. This includes sourcing materials responsibly, treating workers fairly, and promoting transparency.

Long-Term Perspective: Sustainable entrepreneurs typically adopt a long-term perspective, considering the enduring impact of their business decisions on the environment, society, and the economy.

Stakeholder Engagement: Engaging with and considering the interests of various stakeholders, including employees, customers, local communities, and investors, is a fundamental aspect of sustainable entrepreneurship.

Sustainable entrepreneurship is driven by the recognition that business success is interconnected with the health of the planet and the well-being of society. It reflects a shift towards more responsible and conscientious business practices in the face of global challenges such as climate change, resource depletion, and pollution. Musk is a strong advocate of sustainable entrepreneurship and his vision could be seen in how the Falcon 9 was developed and manufactured. SpaceX's commitment to reusability aligns with sustainability goals by reducing resource consumption and waste associated with traditional expendable rocket designs. The Falcon 9 is best known for its reusable design, which contributes to sustainability in spaceflight. The rocket is designed to be recovered, refurbished, and reused for multiple launches. This reusability feature is aimed at reducing the cost of space access by minimizing the need for building new rocket components for every launch (Rich, 2018).

## SPACEX PIONEERS REUSABLE ROCKETS

The Falcon 9 rocket went through six of the seven steps of the new-product development process, and the November 2023 launch would determine if the company could move forward with the last step. The new-product development process typically consists of the following steps (Zomerdijk & Voss, 2011): idea generation, idea screening, concept development and testing, business analysis, product development, test marketing, and commercialization.

1. **Idea Generation:** Space tourism and travel has been a topic of fascination for humans ever since the first man stepped on the moon in 1969. In the 1980s, the world's two superpowers (USA and Russia) revealed plans to send civilians into space, but the idea failed to gain traction. It was not until the early 2000s that space tourism became a reality with the launch of the first privately funded spaceflight by SpaceShipOne in 2004. Several private companies were founded that opened a whole new frontier for human space exploration and adventure after the aircraft/rocket hybrid completed the first, crewed, private spaceflight. However, those private companies built expendable launch vehicles (ELVs) to be utilized only once. The Falcon 9 reusable rocket idea was that of Elon Musk, the CEO of SpaceX, as part of his vision to reduce the *skyrocketing* cost of spaceflights and to send humans to Mars. During this phase of new product development, his team also expounded upon Russian scientist Konstantin Tsiolkovsky's 1895 idea of building a gigantic space elevator, or orbital lift that could take humans to the moon and eventually to other planets (Mellor, 2021).

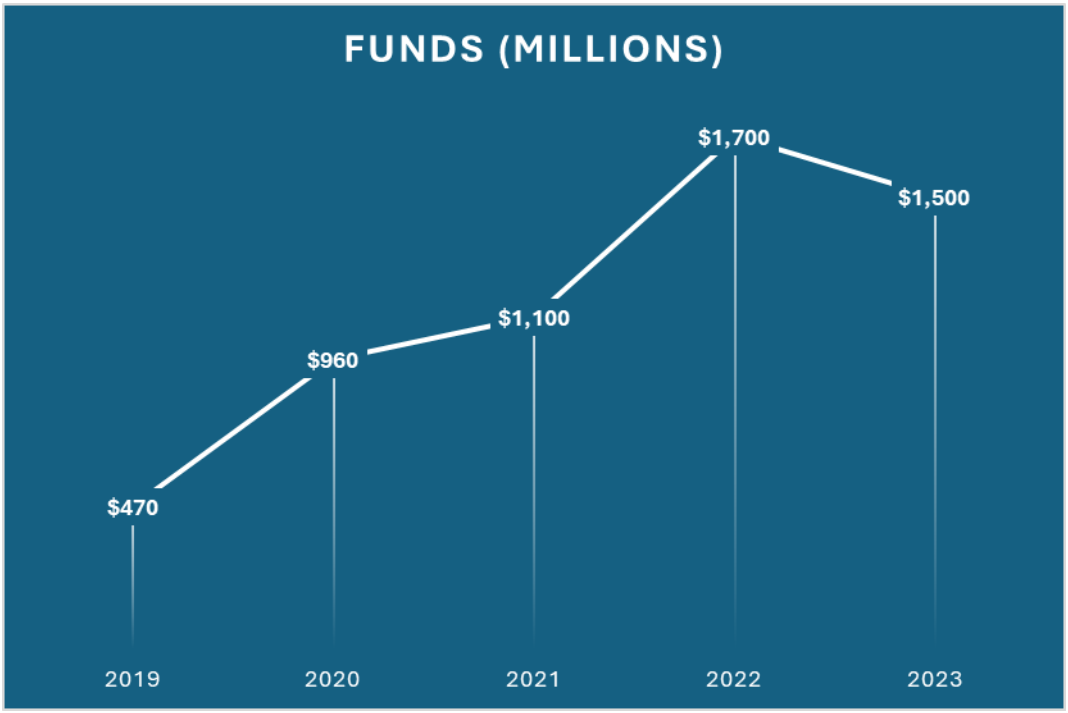
2. **Idea Screening:** At the time, Musk rejected the space elevator, citing potential issues with safety, regulatory compliance, and liability and continued to push forward with the reusable rocket idea. Musk and his team asked (and answered) key questions, such as: a) can the rocket be developed and marketed within the time and budget constraints of SpaceX? and (b) is the

proposed product within the company's ability to produce? The idea for the Falcon 9 rocket was unanimously agreed upon (by both the board and R&D team) to move forward in the NPD funnel. SpaceX conducted a feasibility study to determine whether the proposed rocket was technically and financially feasible. The study included a review of the available resources and analysis of the technology required to turn the idea into reality.

3. **Concept Development and Testing:** Once the feasibility study was completed and the idea was deemed viable, SpaceX began to develop the concept for the Falcon 9 rocket. This involved creating a detailed design specification, identifying the key components and raw materials required, and identifying the suppliers, partners, and logistics needed to build the rocket

4. **Business Analysis:** Before proceeding with the development of the Falcon 9 rocket, Musk and his team conducted a detailed business analysis to determine the financial viability of the project. This included estimating the development and production costs, analyzing the potential market demand, determining the break-even point per launch, and identifying the potential revenue streams (Martin, 2018). The company raised almost $6 billion from 2019 to 2023 (Figure 1). SpaceX was willing to take risks and invest significant resources to develop reusable rocket technology that could substantially lower the cost of going to space and eventually mainstream space travel (Hull, 2018).

**Figure 1. Money Raised Through Funding Rounds by SpaceX (2019 – 2023)**

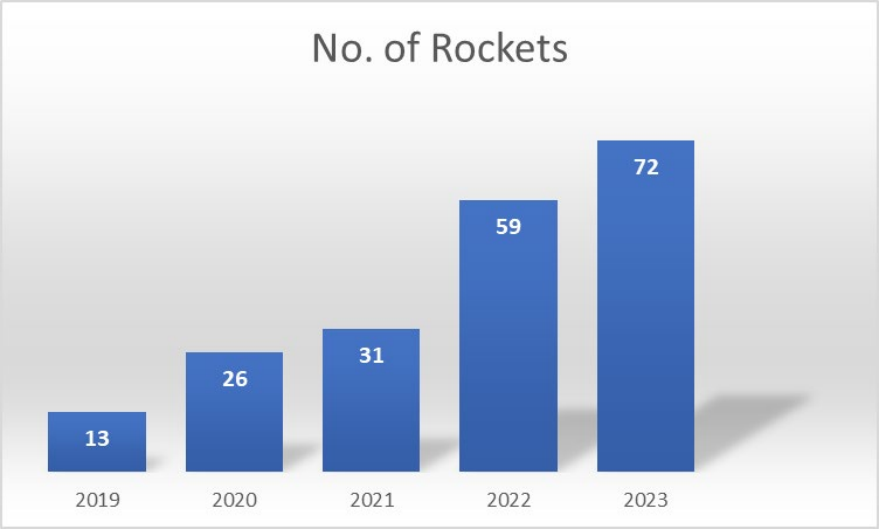



**Source:** Statista (2023)

5. **Product Development:** With the business analysis completed and the concept for the Falcon 9 rocket fully developed, SpaceX began the product development phase. This involved building prototypes, conducting tests, and refining the design based on the results of the testing. A dozen prototypes were built and launched. SpaceX's reusable rockets were consistently improved to be more cost effective than traditional single-use rockets (Bennett, 2018).

6. **Market Testing:** Once the Falcon 9 rocket was fully developed, SpaceX conducted market testing to determine how well the rocket would be received by the company's niche target market. This involved conducting test launches (crewed and un-crewed) and receiving feedback from potential customers and stakeholders. There were approximately 200 Falcon 9 launches over the last five years (Figure 2). Unfortunately, SpaceX experienced a total of four Falcon 9 rocket explosions during the market testing phase (Einhorn, 2022). The most recent explosion took place in November 2020, during a mission to launch the Sentinel-6 Michael Freilich satellite. It's noteworthy that while these incidents were setbacks for SpaceX, the company has learned from them and continued to improve its proprietary rocket technology (Hull & Johnsson, 2020).

**Figure 2. Number of Rockets Launched by SpaceX (2019 - 2023)**




**Source:** Statista (2023)

7. **Commercialization (Product Launch):** Finally, with the market testing completed and the Falcon 9 rocket fully developed, SpaceX launched the product commercially and was on the cusp of selling seats to customers interested in going to the edge of space, the moon, and even Mars. The company continues to refine and improve the Falcon 9 as it strives to make space travel more accessible and affordable.

In brief, Falcon 9 is the world's first orbital class reusable rocket. Reusability allows SpaceX to re-fly the most expensive component of the trip, which in turn drives down the cost of space travel. Although this process may appear linear, Musk knew he would constantly have to

backtrack to earlier process stages when issues arose. The Falcon 9 rocket has introduced several innovations in the space industry that aim to improve sustainability compared to traditional rockets (Vanham, 2023).

Reusable Technology: One of the key sustainability features of the Falcon 9 is its reusability. The first stage of the rocket is designed to be recovered and reused for multiple launches. This can potentially reduce the overall cost of space travel and minimize the environmental impact associated with manufacturing new rockets for each mission.

Reduced Cost: By reusing rocket components, SpaceX aims to make space travel more cost-effective. Lowering the cost of launching payloads into space can make space exploration and commercial activities more accessible and economically viable.

In conclusion, the Falcon 9's reusability features contribute positively to its sustainability compared to traditional expendable rockets. However, assessing the full sustainability of space activities involves considering the broader ecosystem of manufacturing, launch, and orbital practices. It's important to note that the overall sustainability of space activities involves various factors beyond rocket reusability, such as the environmental impact of rocket propellants, space debris management, and the responsible use of space resources (McHale, 2022).

## DIFFUSION OF INNOVATION AND PRODUCT LIFE CYCLE

Before moving to the final step of commercialization, Musk knew he needed to forecast two factors associated with any new product/technology: diffusion of innovation and product life cycle. Diffusion of innovation describes how new ideas, products, or technologies are adopted by consumers over time. Consumers fall into five categories: innovators, early adopters, early majority, late majority, and laggards. Each group has different characteristics that influence their decision to adopt an innovation (Rogers, 1962). Musk envisioned SpaceX's Falcon 9 reusable rockets would have the following types of customers:

1**. Innovators:** For Falcon 9, innovators would be the handful of billionaires willing to take overwhelming risks and pay staggering amounts of money to go to outer space, the moon, and Mars. They are adventurers obsessed with the idea of newness and unafraid to take risks when it comes to trying new experiences, even if they fail. They take pride in being the first ones to try something (Grush, 2023).

2. **Early Adopters:** Early adopters would be the dozens of wealthy and risk-taking space enthusiasts. They would recognize the potential cost savings and efficiency gains of using a reusable rocket and would be willing to take a chance on this new technology. They are opinion leaders and are content to be second to try something.

3. **Early Majority:** The early majority would be the hundreds of ultra-rich customers who are now more comfortable using reusable rockets after seeing the success of SpaceX. They are more risk-averse than the early adopters but still recognize the benefits and possibilities of space travel. By the time the early majority buy a product, more competitors have entered the market; this group will have some choice as to which space company to fly with.

4. **Late Majority:** The late majority would be the group that adopts new technologies only after they are well-established in the market. In the case of Falcon 9, the late majority would

be relatively rich customers who are hesitant to use reusable rockets until they became the norm in the industry.

5. **Laggards:** Laggards are the last group to adopt new technologies, if at all. In the case of Falcon 9, laggards would be the average consumers who use the technology only after it has become mainstream. They pay the lowest price and take the least amount of risk. Most likely laggards won't be taking space flights in this century!

The product life cycle (PLC) is a useful framework for analyzing the evolution of a product or service over time, from its introduction to its eventual decline. The space tourism industry is a new and emerging sector that has yet to reach the growth phase, but we can still apply the concept of the PLC to gain insights into space tourism's potential trajectory. This industry refers to the promising business sector focused on providing commercial, recreational trips to outer space and other planets for private individuals. The industry aims to make space travel more accessible and affordable to the public, offering a range of experiences such as suborbital flights, orbital stays, and lunar expeditions. Musk knew he had to keep an eye on the competitive landscape. Beside SpaceX, key players in the space tourism industry include (Grush, 2022):

**Blue Origin:** Founded by Amazon's Jeff Bezos, Blue Origin is developing the New Shepard rockets for suborbital space tourism, allowing passengers to experience a few minutes of weightlessness and view Earth from the edge of space. Blue Origin is also planning to send humans to the moon on the New Glenn rocket as early as 2024 (Bohannon, 2023).

**Virgin Galactic:** Founded by Sir Richard Branson, Virgin Galactic is developing the SpaceShipTwo vehicle for suborbital space tourism. Passengers will experience several minutes of weightlessness during a parabolic flight trajectory before returning to Earth.

**Axiom Space:** A private company focused on developing a commercial space station, Axiom Space aims to offer private stays in space for both tourists and scientists.

**Orion Span:** A California-based company founded by Frank Bunger. This startup has announced plans to build a luxury space hotel, the Aurora Station, which would orbit Earth and accommodate guests for short-term stays. Orion Span claims to have a waiting list for trips to the space hotel. Tickets start at around $10 million per person.

SpaceX has a pioneering advantage over its competitors. The company's reusable rocket technology is proprietary, meaning it is owned by the company and not available for others to use without permission. SpaceX has invested significant time and resources into developing its Falcon 9 rocket. The company has filed many patents to protect its valuable intellectual property. However, this does not downplay competitive threats. All five companies have great resources and even greater aspirations to take the space tourism industry to a whole new horizon.

Musk predicted the industry to go through these stages (Case & Bachman, 2021):

1. **Introduction:** The space tourism industry is currently in the introduction phase, with a small number of companies offering suborbital flights to wealthy individuals. This phase is characterized by low sales, high marketing and R&D costs, and limited consumer awareness.

2. **Growth:** As space tourism becomes more established and accessible, Musk expects a period of rapid growth. This phase will be marked by increasing consumer demand, as well as more competition and innovation in the market in the next few decades. New players may enter

the industry, and existing companies will seek to expand their offerings and improve their technology and infrastructure.

3. **Maturity:** As the industry becomes more established and mainstream by the end of the century, Musk foresees a period of slower growth and more stable sales. Competition will be fierce, and companies will need to focus on differentiation and cost leadership to maintain their market share. The industry may also face regulatory challenges as it becomes more widespread. Sales and profits will begin to drop in the maturity stage as competition increases and customers begin to look for the next big thing (Lee & Chen, 2009).

4. **Decline:** Ultimately, the space tourism industry may reach a decline phase, either due to oversaturation, technological obsolescence, or changing consumer preferences. However, given the relatively early stage of the industry, Musk predicted a decline would occur in the next century or two, and he wasn't very concerned that sales and profits would fall off completely during the decline stage.

The space tourism industry is currently in the introduction phase of the product life cycle, with significant potential for growth and expansion in the coming decades. However, as with any emerging industry, there are also risks and uncertainties that must be navigated to achieve long-term success. Sending humans to the moon or Mars is obviously a more complex and expensive undertaking that requires significant investment and resources. A trip to the moon typically takes around three days from Earth to lunar orbit. On the other hand, a trip to Mars takes significantly longer due to the greater distance between Earth and Mars. Depending on the alignment of the planets at the time of launch, a trip to Mars can take anywhere from six to nine months one way.

SpaceX's Falcon 9 is a new-to-the-market product exemplifying disruptive technology. The groundbreaking reusable rocket displaces an established technology (ELVs) and shakes up the space industry. Traveling to the moon or even Mars by people other than astronauts has become more of a reality. For space tourism to become mainstream, the industry must be profitable enough to motivate privately funded companies to undertake the staggering costs and long-drawn-out R&D processes required to make space travel safe and affordable. This demonstrates the significance of pricing and generating revenue in the introduction and growth stages. SpaceX has a first-mover's advantage space tourism, and Elon Musk has the vision to capitalize on that. Clearly, the introduction of a new product is a vast undertaking with a lot of open-ended questions, even for a prominent, multi-billion-dollar company.

For thousands of years people lived their entire lives and rarely saw a new product. This changed with phenomenal advancements in transportation and communication technologies. This highlights the significance of innovation and having a pioneering advantage. First-mover's advantage can generate an edge that could be very hard to duplicate. Most people know who was the first person to fly solo across the Atlantic Ocean? A lot of people know that the first man was Charles Lindbergh and the first woman was Amelia Earheart. In 1927, Lindbergh flew solo for 33.5 hours from New York to Paris. His trip ushered in a new era in the history of aviation. However, many people do not know who was the second person to fly solo across the Atlantic? Nobody knows and probably nobody cares! Therein lies first-mover's advantage—people only remember the first.

## SUSTAINABILITY IN SPACE TRAVEL INDUSTRY

Sustainability in the space travel industry refers to the efforts and practices aimed at minimizing the environmental impact and resource consumption associated with space exploration and related activities. The space travel industry has traditionally been resource-intensive and associated with significant environmental challenges. However, as space exploration and commercial activities in space increase, there is a growing recognition of the need to adopt sustainable practices to mitigate negative effects on Earth and space environments.

Key aspects of sustainability in the space travel industry include (Elliott, 2022):

- Reducing Environmental Impact: Space launches, rocket propellants, and space debris can contribute to environmental pollution and impact Earth's atmosphere. Sustainable practices involve developing cleaner propulsion technologies, minimizing the use of harmful substances, and addressing the issue of space debris through responsible satellite and spacecraft disposal methods.
- Resource Utilization: Sustainable space exploration involves finding ways to use resources efficiently, both in terms of materials and energy. This includes exploring in-situ resource utilization (ISRU), where resources available on other celestial bodies, such as the Moon or Mars, are used to support human activities rather than relying solely on Earth-sourced materials.
- Reusable Technology: Developing reusable launch vehicles and spacecraft is a key aspect of sustainability. Reusability can significantly reduce the cost of space exploration and decrease the environmental impact associated with manufacturing and launching single-use vehicles.
- Alternative Propulsion: Research into alternative and more environmentally friendly propulsion systems, such as electric or ion propulsion, is another avenue for sustainability in space travel. These systems can be more efficient and produce fewer harmful by-products compared to traditional chemical propulsion.
- International Collaboration: Collaboration between countries and space agencies can lead to more sustainable practices by sharing knowledge, resources, and technology. International agreements and guidelines for responsible space activities can help ensure that space is used sustainably and for the benefit of all nations.
- Space Habitat Design: For long-duration space missions or the establishment of colonies on other celestial bodies, designing habitats with sustainability in mind is crucial. This involves recycling systems, closed-loop life support, and energy-efficient technologies.
- Education and Outreach: Raising awareness and educating the public about the environmental impact of space activities and the importance of sustainability can foster a sense of responsibility and encourage the adoption of sustainable practices in the industry.

Sustainability in the space travel industry is a multifaceted challenge that requires technological innovation, international cooperation, and a commitment to responsible and ethical practices to ensure the long-term viability of space exploration.

## CONCLUSION

The reusability of the Falcon 9 rocket is considered a step toward more sustainable space exploration. It helps to lower launch costs and reduce the environmental impact associated with manufacturing new rocket components for each mission. Additionally, the development of reusable rocket technology has the potential to make space exploration more economically viable and sustainable in the long run. SpaceX has been working towards the goal of making space travel more sustainable and reducing the cost of space exploration. Sustainability, in this context, can be interpreted in various ways.

Environmental Impact: SpaceX's reusable rocket technology, demonstrated through the Falcon 9 and Falcon Heavy rockets, is a significant step towards reducing the environmental impact of space launches. Reusability lowers the cost of launches and reduces the need for manufacturing new rocket components for each mission.

Market Competitiveness: By lowering the cost of launching payloads into space, SpaceX has increased access to space for various entities, including commercial satellite companies and government agencies. This has led to increased competition and innovation in the space industry.

Space Exploration and Colonization: SpaceX's long-term goals include making life multiplanetary by establishing human colonies on Mars. While this is a challenging and ambitious objective, success in this area could contribute to the long-term sustainability of human civilization beyond Earth (Droste, 2023).

However, it's important to note that the term "sustainability" can also be applied to a company's financial health. As of my last update, SpaceX has achieved several milestones and secured contracts with NASA and commercial customers, contributing to its financial stability. Continued success in securing contracts, advancing its reusable rocket technology, and achieving its Mars colonization goals will likely play a role in the company's long-term sustainability. It's important to note that the timeline for these plans is highly ambitious and subject to change based on various factors, including technical challenges, regulatory approvals, and funding. For the latest information, checking SpaceX's official announcements and news updates.

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