Hyperloop Transportation Technologies, Inc. Reveals Vibranium™ Skin Material for Capsule Safety and Announces Digital Innovation Challenge

Vienna, Austria (May 24, 2016) — Jumpstartfund’s Hyperloop Transportation Technologies, Inc. (HTT) announced today a base technology of the Hyperloop™ System: Vibranium, a smart material specifically developed for the Hyperloop application, which it showed live during its presentation at the Pioneer’s Festival on May 24. (VIDEO: VIBRANIUM ANIMATION)

Made of sensor-embedded carbon fiber, this new smart material is eight times stronger than aluminum and 10 times stronger than steel alternatives, and transmits critical information regarding temperature, stability, integrity and more, wirelessly and instantly. It is also much lighter in weight—roughly five times less than steel and 1.5 times less than aluminum—reducing energy output to propel the capsule.

The Hyperloop Vibranium capsule construction was also revealed, showing the material in a dual-layer sandwich formation. This allows for complete passenger safety even if the outer skin is damaged. The material communicates issues immediately and the Hyperloop capsule would be taken out of circulation for maintenance. This technology is one of the first technologies HTT has developed in conjunction with top Slovakian companies.

“Safety is one of the most important aspects of our system” said Dirk Ahlborn CEO of Jumpstartfund and Hyperloop Transportation Technologies, Inc. “We are 10 times safer than an airplane. Our collaboration with Slovakia and their technical skills in new materials, automotive and production processes have made this technology possible.”

To develop Vibranium HTT contracted with Slovakian collaborator C2i, a company that intelligently engineers carbon-fiber structures for next-generation cars and aircrafts. “With HTT and other Slovakian scientists we helped develop Vibranium, a new smart material, which is the perfect solution to build a safe system,” said C2i founder Patrick Hesel. “The challenges shown by the Hyperloop System are a perfect fit for the technical know-how available in Slovakian automotive, new material, and production processes.”

With an ongoing mission to solve many of the issues that make travel often unbearable, HTT announced the first in a series of innovation calls, starting with a Digital Innovation Challenge
planned on July 6th in Bratislava, which will be followed by several entrepreneurial innovation challenges. As part of the challenge, HTT is developing a digital platform using mobile technologies and big data analytics, creating an opportunity for companies to improve travel and create new business potential. Interested parties are being invited to participate and create new applications for the marketplace.

“The Hyperloop digital ecosystem will allow passengers and businesses to participate in travel in new and exciting ways. It gives us an opportunity to craft a digital world that will mesh perfectly with Hyperloop travel and its many related services—and solve a great many issues that plague business and leisure travelers worldwide,” said Bibop Gresta, COO of Hyperloop Transportation Technologies.

“We believe the connection between the rider and the digital environment is a crucial relationship. This competition will help us find that perfect interactive model to keep our riders happy, informed, distracted, and/or relaxed while planning a trip or traveling in one of our capsules. And it will allow businesses to precisely tailor offers, advertising, entertainment, and opportunities to our passengers, creating a truly singular experience,” Gresta said.

HTT Digital Press Kit available [here](#).

HTT media materials can be found [here](#).
About Hyperloop Transportation Technologies, Inc.

Founded in 2013 by JumpStarter Inc. utilizing JumpStarter’s crowd collaboration platform JumpStartFund, Hyperloop Transportation Technologies, Inc. (HTT) designs, manufactures and builds the most highly profitable, fastest, safest, environmentally friendly transportation system for passengers and goods. HTT leverages technology and a team of more than 520 global experts to bring disruptive innovation to the traditional transportation industry. Hyperloop first gained public interest when entrepreneur Elon Musk published a detailed white paper describing a futuristic mode of transport that would move people from Los Angeles to San Francisco in about 30 minutes. Musk handed the concept to the public asking for entrepreneurs to take over its development while he focused on his existing projects. Hyperloop Transportation Technologies rose to the challenge.

About Hyperloop™

Hyperloop™ is a tube-based transportation system for inter- and intra-city transport. The removal of air in a tube allows for high speed capsule transport. The system maintains passenger comfort while accelerating capsules safely to 760 mph. Hyperloop uses a combination of alternative energy and conservation techniques such as photovoltaics, wind, kinetic, regenerative braking, and geothermal power to ensure sustainability and low cost. This suite of energy sources combined with an accelerated, low-cost build enables Hyperloop to develop rapidly and generate sustainable profitability, unlike most other transportation modalities.

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Hyperloop Transportation Technologies Digital Challenge [powered by Catalysts]

We’re pleased to have you for the first worldwide Digital Hyperloop Challenge today. You’ll be working on a service to improve the Hyperloop ecosystem and make this new means of transportation available to, and more accessible for, a greater audience.

First: Concept

Read: [https://hackathon.guide/](https://hackathon.guide/)

The core value of the Hyperloop Transportation Technology Digital Challenge is to get people to solve problems. In the information age, problem solving has become a key skill for any knowledge worker and the creative industries. Participants will show off their problem solving skills with some guidance and orientation provided by the organizers. Their ideas and projects should revolve around a topic that is challenging in nature, but within cognitive reach so it can be understood and researched in a straightforward manner.

The pursued ideas, projects, and products are not regulated to allow for creative interpretation of the topic and potential combinations with other elements of the challenger’s choosing.

Facts

You will have eight hours to work on your projects. Prepare: a pitch (2 minutes); and/or lightning talk (5 minutes); and/or an investor slide deck.

Judging

Your work will be judged by a jury nominated by the organizers. They will rate your work based on the following criteria:

- **Innovation Potential**
  The more innovative your idea is, the better. Ideally it should have the potential to disrupt a market or open up an entirely new market.

- **Feasibility**
  If what you propose is impossible, this decreases the value of your idea.
Elaboration of your Business Model
We know that 8 hours is a very short timespan for sophisticated ideas and projects, so we will try to assess how well you performed based on the short timeframe.

*These criterias are just examples and subject to change.

Second: Topic

Hyperloop Transportation Technologies aims not only to provide fast transportation. In order to fix public transportation we need to solve many issues beyond the mere movement of people or goods. Travel is a terrible experience. Long lines, waiting for luggage, delayed buses and trains, no communication between passengers, poor optimization of resources...

Public transportation is heavily subsidized and the exploration of new business models, upsells, and creation of new service industries can disrupt this. Imagine a public transportation system that was not only cost-efficient but cost-effective.

Only the creation of a unifying ecosystem can break the existing paradigm of transportation woes—and no company can do it alone. We want to create an environment where HTT provides the infrastructure upon which others can build their businesses.

There are many new business models, services, and other applications that have the goal of solving travelers’ issues and problems. This could be local (such as taxi, Uber, local bus, etc.), as well as long distance (plane, train, regional bus, etc.) travel. But we feel that these solutions haven’t quite measured up to the dynamic problems within the field.

The main goal of this Digital Challenge is to provide app solution for the Marketplace, which seamlessly integrates with the existing Hyperloop app ecosystem. Think of it like an app store for traveling and commuting.

Easy

Participants should devise a concept that makes travel an experience again, solves an issue, entertains, informs, or distracts riders.

Ask yourself:
- What is your process during your daily commute?
- What problems did you face during your last trips? What did you like? Dislike?
- What would be fun for you during your daily commute or longer trip?
- What services would you use during your commute?

Hard

Define alternative business models around knowing your customer, their location (highly targeted), where they are going, where they are coming from, and what they like.

Third: Business
In parallel to implementing your service, think about how it could improve people’s lives, increase reach of the ecosystem, and yield a profit.

Describe a business case for the service. Follow well-established patterns, such as the Lean Canvas or the Business Model Canvas. There are numerous resources on the Internet that will guide you through building a business model. It boils down to asking yourself a handful of basic questions:

- Who is your target audience? Be as specific as possible and focus on a small group of people at first, then broaden your thinking to reach more people.
- What values are you offering? What incentives do they have to use your service?
- What is your value proposition?
- What relationships do you want to maintain with your customers?
- Which channels can be used to promote your service and how do you plan to reach your target audience?
- What resources, activities and relationships are key in order to provide the service?
- What will running your service cost?
- How can you generate revenue?

Data

The following data will be provided:

- Train, Taxi, Bus, Tram, Metro, Plane
- Passengers, personal properties, bookings, trips
- Spatial Availability: Central Europe
- Temporal Availability: 6 weeks