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# **Innovations on the 2024 Honda Pilot TrailSport**

**Presented to: Dr. Rhoda M. Lilan  
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## I. Introduction

From the primitive steam-powered automobiles of the late 1700s and early 1800s, the first gas-powered car by Karl Benz in 1885, the inception of affordable cars brought by the utilization of assembly lines of Henry Ford in 1908, to this day's technologically advanced, feature-packed, convenient cars, this paper will anchor the power of creativity to manifest an invention, and therefore to innovate the seemingly enough features of the Honda Pilot TrailSport. Built for the rugged life, we're featuring the Honda Pilot TrailSport: a 7-seater Sports Utility Vehicle (SUV), running a competent engine, high-performance suspension, a torque that boasts an all-wheel drive system, and a 7-mode drive system (more on these features on the *Present Structure* section). The rugged nature of the Honda TrailSport is a perfect avenue for our creative minds to flourish for innovative ideas. We'll be adding three feasible innovations tailored to the taste of Filipino families. This paper will be the catalyst of ideas that will prove how far we are to the limits of our creativity.

## II. Background

In the Philippines, a total of 109,264 Passenger Cars were sold in 2023, a 27.2% increase compared to the previous year (Marklines, 2024). In 2021, medium cars, and large and small SUVs were the most sold passenger car type, given the large size of Filipino families and households. Interest in electric vehicles among Filipinos was heightened in recent years, with an estimated 1,013 electric vehicles sold in the country as of June 2022. A recent survey also

revealed that 47 percent of Filipino respondents were thinking of buying electric cars for their next purchase (Statista, 2023). From these figures, we can see the significance of motor vehicles from the macro, down to the micro perspective of Filipino families. We can also draw from these that electric vehicles are facing gradual increase in demand in the Philippine Market.

With its key features—Panoramic Moonroof, Roof Rails, **Hill Descent Control**, **18-inch Alloy Wheels**, **5,000 lbs Towing Capacity**, and its **i-VTM4® All-Wheel-Drive System with Trail Torque Logic** (2024 *Honda Pilot - SUV* | Honda, n.d.), one can get the **Honda Pilot TrailSport 2024** in cold cash for PHP 3,385,000 (Carmudi, 2024). Three million pesos is far more expensive than the prices of the commonly acquired Honda cars by Filipinos—Honda BR-V, Honda Brio, and Honda City—which are significantly more older than the one we’re featuring in this paper. But we are not after the price of these models, but rather on how we are going to add innovative features to the already advance TrailSport, and successfully throw it to the Philippine market with our creative advertising strategies. We will soon anchor the power of print media through our Publication Materials—Brochure, Flyer, and a Magazine of the product of this paper.

### III. Present Structure

The Honda Pilot TrailSport has its exterior built for rugged driving. It features **acoustic glasses** for all the windows and the wind shield of the car, including the panoramic **Moonroof**. **Skid Plates** are also mounted on the

bottom of the chassis of the automotive, this is to protect the bottom guts of the TrailSport from the harsh nature of rough rural roads. Its **18-inch alloy wheels** are enough to bite the harsh grit of dirt, sand, snow, and even the tricky surface of mud. **Roof rails** are also provided for holding extra cargo on top of the TrailSport. **Recovery points** to get the vehicle out from being stuck are also integrated on the vehicle. The **Power Tailgate** also makes carrying cargo from, and to the trunk much more easier. Integrated **Class III Trailer Hitch** is also one of the subtle accessory of the TrailSport, flexing its capability to tow **5,000 pounds**. Other than that, the TrailSport's exterior holds **Full LED Lights**, and the competent, safety-vying, **LED Fog Lights**. The available colors for the TrailSport includes **Sonic Gray Pearl, Lunar Silver Metallic, Platinum White Pearl, and Crystal Black Pearl**.

As for the interior, which might not be fully seen on our future scale-model prototype, the Honda Pilot TrailSport has **Heated Front Seats, Durable Synthetic Leather Seats** with orange stitching, **Power Front Seats** with **Driver's Memory Seat**, and **2<sup>nd</sup> - row Captain's Chairs**, all under the scope of the **Tri-Zone Automatic Climate Control**. On the technological side, The TrailSport boasts **9 Bose Speakers—a 245-watt Audio System**, that evokes clear and crisp sounds for streaming music on-the-go via **Bluetooth**. On the Technological aspect of the TrailSport, we have the compatibility of both **Wireless Android Auto™** and **Apple CarPlay®**. On the cockpit, we can access the **Multi-View Camera System (with TrailWatch™)** of the TrailSport with its **9-inch Color Touch Screen**. Underneath it is the **Wireless Phone Charger** that

can charge two devices simultaneously. **USB Ports** are also planted on the front, second, and third rows of the TrailSport, allowing everyone to have access to these ports. And lastly, we have the **CabinTalk® In-Car PA System**, which acts like a typical personal assistant, but CabinTalk® was made for this specific car that highlights the **Smart Entry with Walk Away Auto Lock®** feature of the TrailSport. These are only a fraction of a plethora of specifications of the Honda Pilot TrailSport, if the reader desires to read more about the dimensions and other details about the TrailSport, all details are showcased in their website: <https://automobiles.honda.com/pilot#>

#### IV. Innovative Features

Having to be creative with an already feature-packed automotive in-terms of its exterior for technological innovation, is a real challenge for us. Nevertheless, these are the ideas that populated our minds during various brainstorming sessions.

Considering the rugged nature of the Honda Pilot TrailSport, and the presence of a **pre-built Moonroof** that will provide a panoramic view of the sky, we came-up with these ideas:

1. **Automatic Modular Stargazing Platform** - integrated to the vehicle, and can be accessed by just pulling a belt from one of the seats. The platform will hydraulically deploy a **900mm Refractor Telescope** compatible for the use of eyes and cameras, along with the automatic opening of the moonroof. Seats to be used while stargazing will detach

from the factory-configured position to the preferred location and position of the users. Information about the night sky, such as star maps, weather forecasts, or anything that one might want to put-up on a large screen for viewing will be manifested on the

2. Dual-Mode Headlight/Screen Projector of the TrailSport which is also responsive to touches. In Projecting screens, one can project the screen to any flat surface of any angle, one can even project directly on the road, but this Projecting Mode of the Dual-Mode Headlights is only accessible if the TrailSport is parked, and is done through Android Auto or Apple CarPlay. Toggling between these modes is can be triggered on the cockpit of the TrailSport. With this, drive-in cinema and the benefit of a large screen for any imaginable use, is in the users' hands.
3. Trunk-Integrated Retractable Shelter - Triggered by explicitly commanding the **CabinTalk**, personal assistant of the TrailSport, to deploy the shelter. This command should be verified by CabinTalk for three times to avoid accidental triggers. This shelter will be deployed with the use of mechanically programmed flexible, but tough wires acting as the skeleton of the shelter, and air to expand the weatherproof sheets of the shelter. There will be no need to even-out the ground for settling the shelter as it has its own aerogel floor. Camping furniture and equipment can be easily set up by hand upon the deployment of the shelter. Similarly, the shelter is collapsed by a command to **CabinTalk**. However, the shelter must be free of any furniture and equipment as

**CabinTalk** will not demolish the shelter if the spatial sensors are detecting left equipment. With this automatically deployed and collapsed shelter, adventure life just became more convenient for those who love to experience the outdoor bliss.

#### 4. **Transparent Solar Panels as Glass Replacement on the Windshield and Moonroof**

A recent invention from the Michigan State University are the Transparent Solar Panels. Attempting to innovate a rugged car built for harsh and adventure environments, sustainable energy will come to our minds. What's more suitable than to integrate cutting-edge technological innovations to the existing body of cars which has windshields, windows, and luckily, a moonroof. In the case of the Honda Pilot TrailSport, we'll be replacing the normally tempered and acoustic glass composition of its windshields and moonroof with **transparent solar panels**. The mechanism of converting photons to energy will lie under the trunk, and its controls on the cockpit. This sustainable energy can also be utilized on adventure trips by harnessing the stored energy from the cockpit of the TrailSport.

#### 5. **Body as Canvas, Remote as the Brush**

The varying taste of an individual to colors might be influenced by several factors. And to provide imminent gratification to these sudden bursts of "I should've gotten that color", we'll insert the **visible spectrum of light** to the already luxurious build of the Honda Pilot



TrailSport. The remote key of the TrailSport will serve as the control instrument of this feature, which where a color wheel would be attached onto. This feature is not the usual color-changing feature that the many had already adopted. With ours, you can literally use the remote of the TrailSport as your **palette and paintbrush**, and the body of the vehicle as **the canvas**. Therefore, you're imagination is again, the only limit here.S

## V. Conclusion

Having terrains that are perfect for adventure in the Philippines, this innovation on the Honda Pilot TrailSport will surely contribute to the needs of an average Filipino family in the near future. Having these initial ideas manifest into a scale-model is a step towards their manifestation into reality. Furthermore, to feel the pulse on the current needs and trends of the people is a crucial phase to advance innovations. We should then anchor our motives for initiating innovative advancements to the needs of the people, without neglecting sustainable virtues. The core goal of our innovations on the TrailSport is to provide an all-in-one ready-to-go adventure rig, from stargazing to camping, up to entertainment while utilizing the sustainable energy from the sun.

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