# Cable cars are becoming the core of the theme park industry

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### 1. Doppelmayr Story

Wulfurt, a small mountain village of 8,000 on the west end of Austria bordering Switzerland and Germany, is the home of Doppelmayr. Doppelmayr is a private company that supplies 14,900 ropeway facilities in 95 countries on six continents, and generates more than 1 trillion won (as of 2018). The company, named after its founder Konrad Doppelmayr, merged with Garaventa. a wood-carrying ropeway manufacturer in the mountains, while having a history of producing axes, hooks, and wine juice presses at a blacksmith in 1893. Since then. Doppelmayr has grown into a world-class company with few rivals in resorts, mountain mobility, and tourist cable car markets around the world.

Doppelmayr has pioneered a unique business niche with their unique understanding and experiences with serving mountainous countries where two-thirds of the land is covered by the Alps. Austria alone currently operates about 2,900 cable car routes, of which 2,600 are tourist cable cars, with a market size estimated at 7.2 billion euros. Austria's land area is smaller than that of South Korea, with more than 130 times the number of tourist cable cars in Korea and 60 million users in one winter season.

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But Doppelmayr is not just a cable car company. In addition to what is commonly known as gondolas, lifts, and cable cars, Doppelmayr produces funiculars, which are a form of cable railways which connect points along a railway laid on a steep slope. Funiculars are not only recreational; they are also an important means of transportation for people to commute in cities in mountainous terrain.

Las Vegas, Macau, and other global cities with theme parks feature Doppelmayr's technology. Although the technology that drives cabins with steel cables may seem to have matured, Doppelmayr has continued to dominate the global market with various new patents, safety-first construction capabilities, and relatively low maintenance costs, while considering all climate and environmental conditions. In fact, Doppelmayr's various achievements have been listed in the Guinness Book of World Records. The Wings of Tatev cable car in Armenia has a section of ropeway of 5,765 meters, and the cable car built in the Aba Jang Autonomous Region of Sichuan Province is 4,843 meters above sea level, which is higher than Mont Blanc in Switzerland. The cable car built at Sun World Resort in Halong Bay, Vietnam, boasts the world's largest cabin with a capacity of 230 people. And the Swiss mountain ropeway, which can load 40 tons of luggage per vehicle, was also built by Doppelmayr.

In addition, Doppelmayr proposed cable cars as subway-like public transportation in 2014 to solve the traffic congestion plaguing downtown La Paz, Bolivia, creating a new public transportation system that currently carries 117.8 million people per year on six routes. The Bolivian cable car line built by Doppelmayr will eventually be 21 kilometers long, and four more will be built up to ten lines. It is already the world's longest cable car system recognized by the Guinness Book of World Records. Once all ten lines are in operation, the number of users per day is expected to increase to 350,000. Considering the potential demand for tourists of La Paz to experience the cable cars, it is expected to be a great tourist resource.

## 2. Cable cars and environmental damage issue

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Cable cars are usually installed in mountainous environments rather than downtown areas, which often raises environmental protection concerns. In Korea, various local governments have also faced fierce opposition from environmental groups when installing cable cars for the tourism business.

For example, in Korea, the cable car business at Seoraksan National Park, a famous mountain range in Gangwon Province, was eventually scrapped. The reason was that the Seoraksan mountain area, where the cable cars are located, has been designated as a national park due to its great natural beauty and home to various endangered animals. As a result, 37 years after the installation of cable cars in 1982, cable car operations at the park were completely shut down.

In response, academics have pointed out that daily visitors walking on hiking trails has been more damaging to the environment than building and operating cable cars. For example, the Seoraksan Mountain hiking course is 5km long-which typically takes hikers four hours to reach to the top—is used by more than 700,000 hikers annually. The extent of environmental damage such as rock exposure, root exposure, and road width expansion has already become serious from the amount of hikers who flock to the summit. It is calculated that it will take at least 100 to 400 years to restore the 1cm of surface soil, and the nearly 30cm of soil lost at the bottom of the Seoraksan Mountain hiking course. Many cases around the demonstrate that the use of cable cars is the best way to preserve the environment. A sample case is that at China's Hwangsan Mountain, which has seen a decrease in garbage and water pollution since the installation of cable cars as hikers spend less time traversing the mountains.

It can be said that the nearly one million hikers who climb mountains on foot or travel to the middle of the mountains by car every year place a major burden on the environment. This is why cable cars that use electricity are much more environment friendly than vehicles that use fossil fuels.

# 3. The role of cable cars as a tourism business resource

Regardless of their impact on the environment, local governments across the country are competing to install cable cars in Korea. This is due to the fact that Korea's marine cable car in Tongyeong City became a big hit in 2007, recording 14.9 million cumulative passengers in the 14 years since its opening.

Busan City's Songdo marine cable car was also selected as the "Best Hit Product of 2017" by the Busan Metropolitan government. Since opening to the public 100 years ago, Songdo Beach is now South Korea's number one beach, with many crediting the Songdo maritime cable cars for helping tourism reach over 10 million tourists for the first time.

As such, cable cars are not only attracting tourists but are seen as a catalyst for revitalizing the local economy. It also has the effect of creating and sustaining thousands of jobs each year. Cable cars make it easy for people to go to places that are not easily accessible in mountainous areas or serve as tourist destinations in urban areas. It is also used as a means of transportation inside theme parks and resorts, becoming an essential installation facility for global theme parks.

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