

**J.S.P.M's**  
**Jayawantrao Sawant College of Engineering**  
**Department of Information Technology**

**Audit Course 6: Green and Unconventional Energy [TE]**

**Case Study Activity Submission Report**

**Team Members with roll number and name:**

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**Problem under study:** SolarCity's Mission to Promote Renewable Energy Adoption

**Product/Organization under study:** SolarCity

**Description:**

SolarCity was a leading American provider of solar energy services, founded in 2006 by brothers Lyndon and Peter Rive. The company was acquired by Tesla Inc. in 2016, and is now known as Tesla Energy. SolarCity was a pioneer in the field of renewable energy, offering a range of solar energy services to residential and commercial customers across the United States. The company's mission was to accelerate the transition to clean energy by making it more accessible and affordable for everyone. One of SolarCity's most significant projects was the creation of a solar panel manufacturing plant in Buffalo, New York.

The plant, which was opened in 2017, was part of a \$750 million investment by the state of New York and SolarCity to create a center for solar energy research and development. The factory used cutting-edge technology to produce high-efficiency solar panels at a lower cost than traditional manufacturing methods. The panels were designed to be more durable and efficient than standard solar panels, making them a more attractive option for residential and commercial customers. In addition to manufacturing solar panels, SolarCity also offered a range of solar energy services, including installation, maintenance, and financing. The company's leasing

program allowed homeowners to install solar panels on their roofs without having to pay the full cost upfront. SolarCity's innovative approach to solar energy helped to accelerate the adoption of clean energy in the United States. The company installed more than 2.5 gigawatts of solar energy capacity in its first decade of operation, making it one of the largest providers of solar energy services in the country.

SolarCity was a leading provider of solar energy services in the United States, with a mission to make clean energy more accessible and affordable. The company offered solar power systems to homeowners, businesses, and governments as an alternative to nonrenewable energy sources. SolarCity aimed to address the lack of widespread adoption of renewable energy sources, particularly solar power. The company's products and services were designed to help customers save money on their energy bills over the long term, providing a financial incentive for making the switch to solar energy.

The use of fossil fuels for energy generation has a significant impact on the environment, including the emission of greenhouse gases that contribute to climate change. Despite the potential benefits of renewable energy sources like solar power, the adoption rate in the United States was relatively low, partly due to high installation costs and limited availability. SolarCity aimed to solve this problem by offering affordable solar power systems to customers and making the transition to renewable energy more accessible. The use of non-renewable energy sources such as coal, oil, and gas for energy generation has a significant impact on the environment, including the emission of greenhouse gases that contribute to climate change. Despite the benefits of solar power, including its renewability, reliability, and cost-effectiveness over the long term, the adoption of solar power systems was low due to several factors:

- 1. High Upfront Costs:** The initial cost of installing a solar power system was often high, making it unaffordable for many homeowners, businesses, and governments.
- 2. Limited Financing Options:** Financing options for solar power systems were limited, making it difficult for customers to pay for the initial installation cost.
- 3. Lack of Awareness:** Many people were unaware of the benefits of solar power and did not consider it as a viable option for their energy needs.
- 4. Regulatory Barriers:** The regulatory environment for solar power systems varied from state to state, and in some cases, there were regulations that made it more difficult for solar energy providers like SolarCity to operate.

**Solutions provided by the Solarcity:**

SolarCity aimed to solve the problem of the lack of widespread adoption of solar energy by providing affordable solar power systems to homeowners, businesses, and governments. The company offered several solutions to address the challenges faced by customers in adopting solar power systems:

- 1. Lease and Power Purchase Agreements:** SolarCity provided lease and power purchase agreements that allowed customers to pay for the installation cost of the solar power system over time, reducing the upfront cost and making it more affordable.
- 2. Financial Incentives:** SolarCity offered financial incentives, including rebates and tax credits, to help customers save money on the installation cost and reduce their overall energy bills.
- 3. Public Education:** SolarCity conducted public education campaigns to raise awareness about the benefits of solar power and encourage more people to consider it as a viable option for their energy needs.
- 4. Lobbying for Regulatory Changes:** SolarCity lobbied for regulatory changes that would make it easier for solar energy providers to operate, including changes to net metering policies and the elimination of regulatory barriers.

### **Summary:**

SolarCity aimed to promote the widespread adoption of solar energy as a solution to the environmental impact of non-renewable energy sources. The company addressed the challenges faced by customers in adopting solar power systems, including high upfront costs, limited financing options, lack of awareness, and regulatory barriers. SolarCity offered lease and power purchase agreements, financial incentives, public education campaigns, and lobbied for regulatory changes to make solar power more accessible and affordable for customers. SolarCity's efforts helped increase the adoption of solar power systems and promote the use of clean, renewable energy.

### **Student Sign with Name:**

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