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The Solarlux Torchligh

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ABSTRACT

The solar torchlight innovation aims to provide sustainable and reliable lighting solutions to communities with limited access to electricity. The innovation employs solar panels to absorb and convert solar energy into electrical energy, which is stored in rechargeable batteries that power light sources. The solar torchlight innovation represents a promising solution to address the challenges of energy poverty and climate change. Moreover, addition with many features like compass and bulb as lighter make it a multi-purpose torchlight. The purpose of this innovation is to implement new ideas to bring about positive change and improve efficiency, effectiveness, and competitiveness to the community since there are many complaints about flashlights nowadays like the lack of feature and reliability of the torchlight. The analysis study also can see their criticisms regarding torchlight nowadays performance by users make up 75% of the reported complaints which are LED failure, water leakage, the batteries no longer keeping the charge as they initially had, and the switch failing. Thus, we explore the concept of innovation torchlight, SOLARLUXE and its vital role in shaping the modern world. By highlighting successful examples of innovation, we demonstrate how the torchlight of innovation can drive organizations towards growth and success. Overall, the innovation torchlight represents a beacon of hope for organizations looking to stay relevant and competitive in a rapidly changing world.

Keywords: Torchlight; solar; multi-purpose

INTRODUCTION

Solar torchlight is a lighting device that uses solar energy to generate power and illuminate its surroundings. It works by charging a rechargeable battery during the day through its solar panel and using that stored energy to provide light at night. Solar torchlight is an eco-friendly and cost-effective alternative to traditional torchlights that require disposable batteries or electricity. Solar torchlight is an ideal for outdoor activities, camping trips, emergencies, climbing activities, and for everyday use in area with limited access to electricity.

The problem statements that lead us to do the innovation for the torchlight are because in increasing number of cases regarding to death or missing, and other ill-fated incidents encountered by climbers in recent years. Next, the most common incident in climbing activities is getting lost while hiking and last but not least, some climbers die because of unpreparedness, not bringing the right equipment and inexperience. Hence, this torchlight has been improved with something new to reduce various risks of human activity during the day or night.

INNOVATION DEVELOPMENT

Torchlights are commonly used by people who like extreme activities such as camping. However, the torchlights that are sold in the market have quite limited functions and do not meet the customer's taste in terms of comfort or durability. Regarding these circumstances, we came up with the SOLARLUXE idea, which is a multipurpose torchlight that can make everyone's life easier.

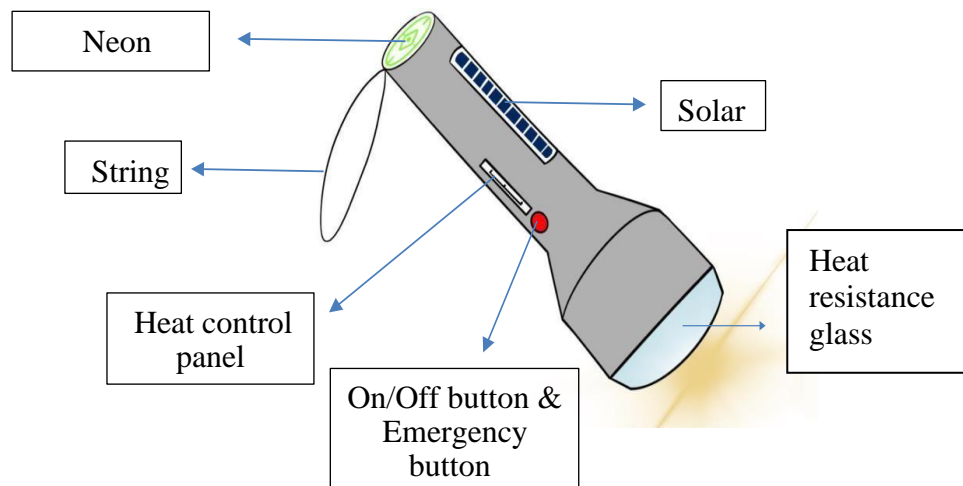


Figure 1

In our innovation, we have collected some information about creating new products. This flashlight has a variety of special features that can compete with the torchlights sold on the market, including the fact that it is charged using solar energy. By using solar energy, we can save non-renewable energy and maintain the sustainability of the environment. Next, it is also equipped with a neon compass that helps climbers determine the exact direction to reach their destination. They do not have to worry about carrying a lot of things when doing mountain climbing expeditions. It has been mentioned that this multi-purpose torchlight has two functions which it can be used as a light source outdoors and also act as a lighter. Therefore, it is equipped with heat-resistant glass that aims to keep users safe from being exposed to hot heat. If they want to light a fire using the lighter, they need to open the heat-resistant glass and bring the torchlight closer to the material to be burned. The users only need to control the light intensity of this torchlight by adjusting the heat control panel. Moreover, it is also equipped with an emergency light that can help users with any problems that occur. They only need to press the "on/off" button twice to turn on the emergency lights. Finally, we also added a string to make it easier for users to carry this lamp.

COMMERCIAL POTENTIAL

A SOLARLUXE torchlight with commercial potential could have innovative features such as long-lasting battery life, brightness control, and a durable design, making it an attractive and reliable option for consumers in various settings such as camping, hiking, or emergency situations.

The precise features and intended application of a torchlight would determine its target market. For instance, if the torchlight is intended for outdoor pursuits like camping or hiking, the target market would be outdoor enthusiasts who place a premium on equipment's dependability, brightness, and longevity. If the torchlight is designed to be used in emergencies, potential customers could include homeowners, emergency personnel, and those who live in locations that frequently have power outages. The target market might also be influenced by additional criteria like price point and brand repute. In order to maximise the torchlight's potential for commercial success, the target market should coincide with its intended purpose and distinctive qualities.

CONCLUSION

In conclusion, we can use our knowledge that we learned to applied in our daily use. We also managed to achieve our objectives which are can evaluate the effectiveness of innovation product that can be used by the public, to foster a culture of innovation and continuous improvement, while also promoting collaboration and teamwork among team members and to develop practical, actionable recommendation that can be implied to drive growth. Some improvement that we can do in the future is we can add cute compass to help hikers find way out. We hope that by using our product, we can reduce many accidents especially for hikers.

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