



اَوْبُوْدَسِيْتِي تَتِيكْنُوْلُوْكِ مِيَاْرَا  
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# **ENT600 TECHNOLOGY ENTREPRENEURSHIP**

## **TECHNOLOGY BLUEPRINT**

### **SMART GRASS CUTTER**



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## **1.0 EXECUTIVE SUMMARY**

In this modern time, it is normal to see the house with the home yard. Most of people like to build their house in lot area or buying a house that has a yard so that they can do gardening and another activity outside their house. Hence, DD Technology Company introduces a new product called Smart Grass Cutter. As we known, the grass cutting process took a long time to finish the work. So, it is designed to make cutting and cleaning work easier. Besides, it will save a lot of time cleaning the home yard.

The purpose of this product is to facilitate the work such as cutting, collecting, and cleaning the grass at the same time. Then, it is also designed as a user friendly since it can be used by teenagers until senior citizens. The Smart Grass Cutter user no need to carry the load of the machine motor on the shoulder and swing the cutting blade during the cutting process.

First of all, the company has set the target market for intensive selling. In other words, which types of customer groups that would buy the product. The company's target customer is for customers that have a home yard and the contractor that serves customers in lawn mowing.

This Smart Grass Cutter has functions and advantages in today's grass cutter machine. It is because it can do cutting and cleaning at the same time which is multipurpose. Thus, it is providing a competitive advantage over more established competitors.

Lastly, the management team of the company is a successful person and have their own experience in handling the work. So, it can be seen that the outcome of the product will be as great as the team members.

## **2.0 PRODUCT DESCRIPTION**

In this new era of globalization, most of the people wish to live in the landed or bungalow house. As known, if the people live in this type of house surely they will have a home yard at their house. Since the people take long hours and effort to do the grass cutting activities, the company has come up with the idea to make the grass cutting activities easier in their life. By taking the advantages of this situation, the Smart Grass Cutter has been invented with special features. The company aims to produce a user-friendly product. So, it can be used by all ages and gender with more safety criteria.

The Smart Grass Cutter features can do two work at the same time which is cutting and cleaning. To produce this product, the company needs to do some innovation towards another material such as bicycle, motor, skyscraper, tire, reel blade and carbon steel. First of all, the Smart Grass Cutter is made of bicycles. This bicycle is made of carbon steel which is a strong metal. The maximum load of this Smart Grass Cutter is up to 150 kg due to the strong metal used for the bicycle. More interesting, the Smart Grass Cutter using the motor chain instead of the bicycle chain. It is because the motor chain can make the movement of the bicycle smooth while using the motor as a generator. Users just need to fill the fuel in the motor to start the motor. Furthermore, the user also can choose either want to cycle the bicycle or just using the motor to make the bicycle move.

Besides, in front of the Smart Grass Cutter also have a reel blade. The blade makes the cutting grass process easier due to the curved design of the blade and in-cylinder size. The blade is attached at the tire of the bicycle so it will cut the grass when the bicycle moves. Besides, it is also environmentally friendly because when the rolling of the tires happens it will generate the kinetic energy that makes the blade cut the grass while it still spinning. Hence, it will make the work faster using this type of blades. The advantage of this type of blade is its high-efficiency rating. A rotatory mechanical device that extracts energy from the movement and converts it into useful work.

Moreover, this unique Smart Grass Cutter also has the skyscraper behind. Scrapers is a type of traditional equipment used in agriculture to help farmers run their farm activities. The scrapers have a wide variety of usability functions as ground bulking, removing grass-weeds and sweeping trash on the field. The scrapers have a brush-like eye, made of iron and have a

holder of a simple wood length. Using the scrapers is easy where it only needs to be rooted to the ground according to the place's suitability. The skyscraper will attach with the bicycle using the nuts and also keep racks the grass while the Smart Grass Cutter still moving. It will be attached side by side to make all the grass swipe off.

Carbon steel is used in this Smart Grass Cutter because it is a metal produced from iron and carbon. Iron produced from the purification of copper and make a high quality for cutting the blade due to the component in the steel. Because of that, the Smart Grass Cutter can weight up to 150 kilograms and safe to use.

Tires play an important role in this Smart Grass Cutter. The function is to make the Smart Grass Cutter move and stable to do the cutting process while holding the blade. While the tire move, the blade will continue cutting the grass. This is because the kinetic energy that produces from the movement of the tire makes it cut the grass. It is efficient and easy to handle. The Smart Grass Cutter is very useful and compatible with the user and also user friendly which the grass cutter produces from the bicycle.

This Smart Grass Cutter helps people with the design which very simple and productive to use it. Besides, it also comes with a compatible size where the user can easy to use and keep it in the house with safety protection. On top of that, the cleaning process of the Smart Grass Cutter will make the work easier because it can do both work which is cutting and cleaning at the same time. It could save a lot of time doing grass cutting activities.

Moreover, the benefit of using the Smart Grass Cutter is the customer does not need to hold the heavy motor on their back while holding the blade and walk to do grass cutting activities. But, the customer just needs to sit on the bicycle and mow the grass. The customer can choose either want to cycle the bicycle itself or want to use the motor provided. However, the most interesting about the product is the multipurpose product. It is because the market does not have a grass cutter machine that can do both work such as cutting and cleaning at the same time.

For further new products from the company, it is suggested to produce a foldable grass cutter that also can do both work. Because when the grass cutter is foldable, it will be easy to carry anywhere with that more compatible in size.