Pengembangan Desain Produk Sepeda Motor Listrik Menggunakan Metode Pengintegrasian Kano Model dalam Quality Function Deployment (QFD)

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ABSTRACT

In accordance with the Regulation of the President of the Republic of Indonesia No. 55 of 2019 concerning Battery-Based Electric Motor Vehicles has led to the growth of the motorized vehicle industry and products. As an innovation that is still new, of course it still needs various kinds of studies so that this product can truly be accepted by consumers, so producers must create products that depart from the voice of customers which in the end become reliable products that lead to industrial profits. In the research entitled, "Development of Product Design for Electric Motorcycles Using the Kano Model Integration Method in Quality Function Deployment (QFD)", this examines the use of integrating the Kano Model into Quality Function Deployment (QFD) with the House of Quality (HOQ) matrix, we can find almost all attributes have a negative gap value (except the vehicle body and display on the odometer) this indicates that the existing attributes of electric motorcycles have not satisfied consumers. while the results of attribute classification using the Kano method, obtained 25 attributes that fall into the important category. Among other things, 8 attributes are in the Must-be category, 5 are in the One-dimensional category, 7 are in the Attractive category, and 5 are Indifferent. The independent category can be omitted because this category has no effect on the satisfaction level of motorbike owners. From the results of the integration of the Kano method and Quality Function Deployment up to stage 3 (quality process) the output of the House of Quality stage 3 is obtained by taking into account the value of Ranking Priority Technical Contributions (%). Improvement efforts are obtained that need to be prioritized by electric motorbike manufacturers in increasing consumer satisfaction, with the 5 highest Quality Process contributions being full (battery) in 60 minutes (charging process speed) with a contribution value of 18.1%, improving battery quality (storage) with a contribution value of 17.0%, collaboration with associations (increasing charging stations) with a contribution value of 14.0%, (increased cooperation with) Swap Battery Company with a contribution value of 11.6%, and the use of aluminum alloy material (as a frame material) with a contribution value of 5.6%. But in general it can be concluded that the most important thing in the development of electric motorbikes is in terms of improving the quality (durability and charging power) of the battery.

Keywords : Customer Satisfaction, Kano Model, Quality Function Deployment (QFD), House of Quality (HOQ)

ABSTRAK

Sesuai Peraturan Presiden Republik Indonesia No. 55 Tahun 2019 mengenai Kendaraan Bermotor Listrik Berbasis Baterai memunculkan bertumbuhnya industri dan produk kendaraan bermotor. Sebagai suatu inovasi yang masih baru, tentu masih sangat membutuhkan berbagai macam kajian agar produk ini benar-benar dapat diterima konsumen, sehingga produsen harus menciptakan produk yang berangkat dari voice of customers yang pada akhirnya menjadi produk handal yang bermuara pada profit industri. Dalam Penelitian yang berjudul, "Pengembangan Desain Produk Sepeda Motor Listrik Menggunakan Metode