

UNIVERSITI TEKNOLOGI MARA

**DESIGN AND FABRICATION OF AN
AUTOMATIC CEILING FAN
CLEANER**

MUHAMMAD ANIQ IQMAL BIN AMINUDIN

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ABSTRACT

The project design based on the finite element analysis for a new ceiling fan cleaner. Objectives of this projects are to design a new project that ergonomic for users such as safety and user-friendly. As we know, users commonly cleaning their fan using an old method. Using that method, it will make users will feel unsafety and cleanliness. Based on past research, this thesis focuses on the creation of a new design that can overcome all the difficulties experienced. The design was develop using solid works software to view three-dimensional model. A survey method was used on the local community members who were experiencing issues. Based on the findings of how to solve those issues, we know that the ideal technique is to use an adjustable rod, a roller with a motor and a waste box to collect dust. As a result, all users of our products will be able to save money and time.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Ceiling fans create a circulation of air or other gases or vapours and a standard device for ensuring proper ventilation in a room, especially in Malaysia's high humidity climate. It generates a lot of air flow, which disperses dust around the room. Ceiling fans are also used to circulate air in rooms and buildings in order to cool motors and gearboxes, to cool and dry humans, and to exhaust dust and poisonous pollutants. Other than that, ceiling fans are regarded as the most efficient ventilation methods for distributing air in a room for long-term cooling plans, and they will be installed in every home, even if some homes use air conditioning as their cooling system. Ceiling fans are widely used to circulate air and reduce heating costs in offices, homes, restaurants, and many other types of buildings.

Most people do not bother with ceiling fan maintenance, but in order to maintain your ceiling fan operating at top efficiency, you must conduct some periodic maintenance on the fan. For example, ceiling fan cleaners are intended to replace conventional methods of cleaning a ceiling fan blade. This project is about a simple cleaning system in an economical manner. The major goal of this project is to design an ergonomic ceiling fan cleaner that is user-friendly and simple to operate. Based on the study, the project is created to address an issue that the user has previously encountered. This will guarantee that the users clear all the dirt from the ceiling fan. As a result, the goals of this project are to ensure that the new ceiling fan cleaner design can resolve all the problems.