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"Empowerment of Special Meeds through Invention & Innovation"

## EXTENDED ABSTRACT

# MiiEX'2024

#### **MELAKA INTERNATIONAL INTELLECTUAL EXPOSITION 2024**

"EMPOWEREMENT OF SPECIAL NEEDS THROUGH INVENTION AND INNOVATION"

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## MiiEX'2024

#### MELAKA INTERNATIONAL INTELLECTUAL EXPOSITION 2024 "EMPOWEREMENT OF SPECIAL NEEDS THROUGH INVENTION AND INNOVATION"

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INNOVATION, INVENTION, AND DESIGN

#### FOREWORD BY THE RECTOR OF UITM CAWANGAN MELAKA



#### Professor Ts. Dr. Mohd Rasdi bin Zaidi Rector, Universiti Teknologi MARA (UiTM) Cawangan Melaka

Welcome to the Melaka International Intellectual Exposition 2024 (MIIEX '24). It is an honour for me, on behalf of UiTM Cawangan Melaka, to thank all of you for joining MIIEX '24. We are proud to inform you that this is the 13th consecutive year that UiTM Cawangan Melaka is organizing this exposition. Since 2009, UiTM Cawangan Melaka has successfully hosted this innovation exposition. Not only have we succeeded in organizing the exposition, but we have also successfully embarked on commercialized products.

2024 is a special year where MIIEX 2024 emphasizes the development of special needs. As we know, special needs indicate a limitation in a person's ability to engage in and benefit from various aspects, such as daily activities and education. Hence, with the theme "Empowering Special Needs Through Invention and Innovation," it is a platform for industries, professionals, academicians, students, and communities to share their innovative ideas and products to increase accessibility for those with special needs.

The successful implementation of MIIEX '24 is our joint success. This event was supported by the Melaka state government through YB Datuk Fairul Nizam bin Roslan, the EXCO of Science, Technology, Innovation, and Digital Communication. I also want to express my

gratitude to Universitas Negeri Padang, Indonesia, Universitas Muhammadiyah, Makassar, Indonesia, the International Association of Economic and Businesses (IAEB), Universiti Sains Islam Malaysia, Ibnu Ummi Maktum Research Center (UMMI), USIM, and The Southeast Asia Minister of Education Organization Regional Centre for Special Educational Needs (SEAMEO SEN) as our co-collaborators for MIIEX 2024.

The collaboration from various parties in MIIEX '24 is a platform that will improve cooperation and interweaving among industries, professionals, academicians, students, and communities in shaping their potential in developing innovation products. This exposition also serves as a platform to cultivate and uphold the nation's innovation culture by presenting new ideas and research by young people, especially from academia and universities. Indirectly, MIIEX '24 will encourage all inventors towards empowering Science, Technology, Engineering, and Mathematics (STEM), especially in primary and secondary schools.

The new digital landscape also inspires more innovation and new ideas that contribute to various activities, such as business and industries. As a university that encourages "Research and Innovation," we aim to foster more innovative products that benefit scholars, industries, and communities, addressing issues to improve our present and future life.

This exposition would never happen without dedication, teamwork, and commitment. A round of applause should be given to the committee teams, who are the backbone of this exposition. Their hard work, effort, and time made this exposition possible.

Finally, I would like to conclude this brief remark by thanking all the participants and stakeholders for joining the exposition. We hope that this collaboration never ends here.

Thank you.

### FOREWORD BY THE DEPUTY RECTOR (RESEARCH & INDUSTRIAL LINKAGES)



#### Associate Professor. Dr. Nur Hayati binti Abd Rahman

#### Deputy Rector (Research & Industrial Linkages), Universiti Teknologi MARA (UiTM) Cawangan Melaka

With much passion and privilege, let me warmly welcome all of you to the Melaka International Innovation Exhibition (MIIEX), UiTM Cawangan Melaka's flagship event. I firmly believe that events such as these demonstrate the gradual evolution of this platform in terms of its significance and its governing principles within the sphere of learning and the broader scholarly society.

The theme for this year, "Empowering Special Needs Through Invention and Innovation," strongly connects to our mission of using research and technology to make a positive impact on the world we live in. Besides enforcing the message of diversity, this theme also reaffirms our focus on creating products to improve the lives of people with disabilities (PWDs). Such innovations are vital as only through focused constructive changes can society become more sensitive to the needs of all members.

MIIEX allows researchers, students, and industry professionals to come together, share their innovative research, and develop viable research partnerships. It has been great to see the enthusiasm of the participants and the efforts they put into their projects, which can offer various social and economic benefits. This is why one can state that MIIEX is a great

opportunity for creating connections between the academic environment and industry, facilitating the implementation of innovative and promising projects.

Finally, I would like to express my sincere appreciation to all the members and supporters of the organizing committee, all the participants, sponsors, and everyone involved in preparing this event. I want to express my gratitude for your commitment and involvement, as the success of MIIEX and the development of an active culture of innovation in our university and beyond is partly owed to your support.

Thank you

#### FOREWORD BY THE PROJECT DIRECTOR



#### Dr Zulkefli bin Muhamad Hanapiyah Senior Lecturer

Assalamualaikum and Warmest Greetings,

It gives me a great pleasure, on behalf of the organizing committee, to welcome all participants and speakers to the Melaka International Intellectual Exposition 2024 (MIIEX '24) with the theme "Empowering Special Needs Through Invention and Innovation." We are honoured and pleased to welcome all participants to this biennial event.

MIIEX '24 is a platform that gathers experts from local and international industries, academia, scientists, researchers, and the community to contribute to the advancement of scientific and technological knowledge. This knowledge helps develop disruptive innovation products that improve daily activities for businesses and the community, especially those with special needs.

MIIEX '24 provides an atmosphere for inventors of all levels to gain new exposure and collaborate. Indirectly, this promotes a collaborative and innovative culture that focuses on cutting-edge technologies and new standards in technology and creativity.

MIIEX '24 is anticipated to serve as an arena for participants to acquire and disseminate revolutionary information on ideas and innovation. It is intended that the competition will expose the contestants' minds to the latest technologies and designs, aligning with the government's goal of encouraging innovation in Malaysia.

Finally, I want to compliment my fellow committee members on their amazing efforts, which were vital to the event's success. In addition, I want to thank our co-organizers, event sponsors, and participants. Optimistically, we hope that all new knowledge discovered, invented, or innovated will lead us toward future sustainability.

Thank you.

#### FOREWORD BY MELAKA STATE EXCO OF SCIENCE, TECHNOLOGY, INNOVATION AND DIGITAL COMMUNICATIONS



#### YB Datuk Fairul Nizam bin Roslan

#### Melaka State Exco of Science, Technology, Innovation and Digital Communications

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Finally, I would like to conclude this brief remark by thanking all the participants and stakeholders for joining the exposition. We hope that this collaboration never ends here.

Thank you.

#### **MIIEX'24 ORGANISING COMMITTEE**

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	MUHAMMAD FURQAN BIN AZHAR
	KHAIRUL AZHAR BIN LOCHMAN

#### ABOUT MIIEX'24

MIIEX'24 is an innovation competition annually organised by UiTM Melaka with the intention to bring together ideas and inspiration that could fit in for commercialization needs. This event creates a platform for researchers to establish networking, partnership and opportunities to collaborate with industries.

#### **OBJECTIVES**

- 1. Encourage and instil passion towards inventing and innovating among UiTM Cawangan Melaka staff, students and academicians of local and international higher education institutions;
- 2. Highlight distinguished talents of skilful inventors and exhibit intellectual products, inventions and innovations among local and private tertiary institutions, government and private agencies, including international participants;
- Become an effective Business Matching platform for participating research products, matching industries and partnering government agencies;
- 4. Recognise, inspire and promote invention and innovation products to be patented and commercialized;

5. Increase passion towards inventing and innovating through research and boost interests of government and non-government agencies to obtain consultancy services from a line up experts of higher education institutions and UiTM Cawangan Melaka.

#### THEME

### 'EMPOWERMENT OF SPECIAL NEEDS THROUGH INVENTION AND INNOVATION'

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## ShoeDry

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#### Abstract

An innovative shoe drying method created to tackle the typical discomfort and hygiene problems related to damp footwear. Conventional shoe drying processes are typically slow and inefficient, resulting in unpleasant odours, bacterial development, and pain for wearers. The shoe dryer we designed employs cutting-edge technology to provide efficient and thorough drying, ensuring comfort and cleanliness. The shoe dryer uses a combination of mild heat and air circulation to effectively remove moisture from shoes without harming sensitive textiles. The tiny and portable form enables convenient use in a variety of situations, including residences, gyms, and outdoor activities. The dryer has adjustable settings to suit various types of footwear, such as sneakers, boots, and sensitive items like leather shoes. This shoe dryer provides a practical solution to the issues related to wet footwear, enhancing comfort and cleanliness for users. Its efficient performance, adaptability, and safety features make it a useful asset for any residential or commercial setting.

Keywords: Shoe dryer, damp footwear, hygiene, technology, moisture removal

#### **1. INTRODUCTION**

Our team primarily addresses the issue of someone who does not have enough time to dry their wet shoes due to inclement weather. So we decided to come up with this product, which is

ShoeDry. ShoeDry is a shoe dryer that can be used anywhere as long as the place has a plug to plug it in, and it can also be used even in bad weather. Its not only lets their wet shoes dry while doing other things, but it also helps those who are concerned that their shoes are not drying evenly. Wet shoes have the potential to smell bad, especially from the insole. Because of it, we must let it dry evenly to make sure that thing does not happen anymore and is long-lasting. When determining our target market, we prioritize persons confronting these issues, particularly those who live in areas prone to bad weather or participate in outdoor activities where shoes frequently become wet. This audience includes a wide spectrum of people, including busy professionals, outdoor lovers, and families who all need a dependable and fast shoe drying solution. To properly reach this varied demographic and promote ShoeDry, we will employ a comprehensive marketing approach involving a variety of platforms and techniques. This plan will consist of focused web advertising, sales promotions, personal selling techniques, and public relations campaigns. By using a diverse strategy to promotion, we want to effectively enhance ShoeDry awareness and drive demand within our target market. We used that information to create this product to address this issue. The material of this dryer is made from stainless steel on the outside and silica fabric on the inside. This dryer can hold up to six pairs of shoes, depending on the shoe size at one time due to its huge compartment. It also has 2 levels, where the height is 40cm and the width is 60cm each level with 5kg weight and only has one colour, which is grey. The blower portion of this type of dryer is placed inside the box, and the air blades are placed on top of it. In order to ensure that the dryer wind reaches and dries the shoe, we must place the shoe inside the box, plug in the cable, choose the temperature of the dryer first before pressing the start button and lastly, shut the box door.

#### 2. OBJECTIVE

The objective is to create a cutting-edge ShoeDry machine that will change the process of drying footwear. This machine is designed to efficiently remove moisture from shoes, boots, and other types of footwear, thereby extending their life and improving user comfort. The design will emphasize usability, ensuring that people of all ages can readily utilize it. Furthermore, sustainability is an important factor, with an emphasis on reducing energy usage and environmental impact. The ShoeDry machine aims to provide a practical solution for drying footwear while conserving resources by integrating cutting-edge technology and eco-friendly methods.

### 3. NOVELTY & INVENTIVENESS

One of the most significant aspects of our innovative ShoeDry machine is its adaptability to various types of footwear whether it's sneakers, leather boots, or delicate dress shoes, our machine has adjustable settings and specialized drying sections to fit a variety of types and fabrics. This versatility allows customers to easily dry their entire shoe collection, reducing the need for various drying techniques and streamlining the process.

Furthermore, our ShoeDry machine uses smart technology to improve functionality and user experience. Users may precisely and easily modify their drying preferences depends to programmable timings, adjustable heat levels, and straightforward controls. Our innovative ShoeDry machine is a game changer in footwear care, combining cutting-edge technology, adaptability, and sustainability to provide unrivaled performance and customer happiness.

# 4. PRACTICALITY & USEFULNESS

Our design idea for the ShoeDry machine prioritizes practicality and usefulness, ensuring that it becomes a must-have equipment in every household. By managing the prevalent issue of wet or damp footwear, our machine provides a practical solution that saves time, maintains shoe quality, and improves user comfort. Unlike traditional methods, which can be dirty, time-consuming, and unsuccessful, our machine offers a dependable and quick way to dry shoes of all varieties. To assure accessibility to our target market, we carefully planned our pricing approach. We estimated a competitive selling price for ShoeDry by performing a basic costing calculation that took into account production costs, overhead expenses, and a reasonable profit margin. Our product's selling price is RM180.Our goal is to develop a device that offers outstanding value for money by balancing price, quality, and usefulness.

One of the primary benefits of our ShoeDry is its ease of usage since it was designed with simplicity in mind, requiring little effort from the user and being accessible to people of all ages and abilities. With basic controls and straightforward operation, anyone can rapidly learn how to efficiently use the machine, avoiding the need for complex setups or specialized skills.

Furthermore, our ShoeDry machine is designed to be versatile and adaptable to various needs and preferences. Whether it's drying a single pair of shoes or multiple pairs simultaneously, our machine can accommodate different quantities and styles with ease. Adjustable settings allow users to customize drying times and temperatures according to their specific requirements, ensuring optimal results every time.

## 5. CONCLUSION

Finally, ShoeDry exemplifies our commitment to innovation and sustainability, going beyond the traditional job of a footwear dryer to become a lifestyle-enhancing solution. ShoeDry solves the common problem of wet shoes caused by bad weather or outdoor activities, not only saving time but also extending the life of footwear. Its ability to accommodate a variety of shoe types, along with simple controls and adjustable settings, enhances the process of drying and facilitates shoe care routines for people of every age and level of ability. Furthermore, ShoeDry's commitment to sustainability, apparent in lower energy use and eco-friendly materials, fits in with the rising need for environmentally friendly products. ShoeDry promises to change the shoedrying experience by offering customers a necessary appliance that surpasses expectations and enriches their daily lives.

## REFERENCES

- Jennifer, H., Katie, O. (2017), *The Best Shoe Rack. The New York Times*. https://www.nytimes.com/wirecutter/reviews/best-shoe-rack/
- Dr. Faqir, R. (2023). Shoe Hygiene prevents feet from diseases. Linkedln. <u>https://www.linkedin.com/pulse/shoe-hygiene-prevents-diseases-dr-faqir-ur-rahman-</u> <u>nfpef?trk=articles\_directory</u>
- Poh, K., Kian, S., Nicholas, M., Li, W., Chiew, Y., Jian, A., Kai, L. (2015). Design and Development o fan Automated Shoe Rack. ResearchGate, 1(1), 1-10. <u>https://www.researchgate.net/publication/283837407\_Design\_and\_Development\_of\_an\_\_Automated\_Shoe\_Rack</u>

