

MELAKA
INTERNATIONAL
INTELLECTUAL EXPOSITION

MIIEX'24

12 JUNE '24

Dewan Taming Sari,
Universiti Teknologi MARA Caw. Melaka,
Kampus Alor Gajah, Melaka

*"Empowerment of Special
Needs through Invention
& Innovation"*

**EXTENDED
ABSTRACT**

MiiEX'2024

MELAKA INTERNATIONAL INTELLECTUAL EXPOSITION 2024

**“EMPOWERMENT OF SPECIAL NEEDS THROUGH INVENTION AND
INNOVATION”**

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UiTM Cawangan Melaka

KM26 Jalan Lendu,

78000 Alor Gajah

Melaka Bandaraya Bersejarah

Website: <https://vmiex.uitm.edu.my/>

MiiEX'2024

MELAKA INTERNATIONAL INTELLECTUAL EXPOSITION 2024

**“EMPOWERMENT OF SPECIAL NEEDS THROUGH INVENTION AND
INNOVATION”**

EDITORS AND COMPILERS:

Dr Maimunah Johari

Puan Norlinda Tendot Abu Bakar

Puan Maymunah Ismail

Puan Nor Halawah Ahmad

Cik Afzan Shahilla Amir Hamzah

Puan Azira Rahim

COVER DESIGN:

Rashidy Samsudin

Wan Nur Khalisah Shamsudin

Ridzuan Adli bin Azidin

PUBLISHED BY:

UiTM Cawangan Melaka

KM26 Jalan Lendu,

78000 Alor Gajah

Melaka Bandaraya Bersejarah

Tel: +606-5582094 / 2190 / 2113

eISBN: 978-967-2846-81-9

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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 Umri 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

Welcome to the Melaka International Intellectual Exposition 2024 (MIIEX '24). It is an honor 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.

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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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	RASEEDA BINTI HAMZAH
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DESIGN & MULTIMEDIA	EN RASHIDY SAMSUDIN
	RIDZUAN ADLI BIN AZIDIN
	WAN NUR KHALISAH SHAMSUDIN
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	KHAIRUL NURMAZIANNA ISMAIL
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	PN MAYMUNAH ISMAIL
	PN NOR HALAWAH AHMAD
	PN AZIRA RAHIM
	NORLINDA TENDOT ABU BAKAR
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	AFZAN SAHILLA BINTI MOHD AMIR HAMZAH
	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;
3. 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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Bornean Cuisine Restaurant

Muhamad Khairul Rizal bin Yakob ¹, Nur Safiya Putri binti Shuhairi², Nur Aina Aqila binti Nordin ³, Ryana binti Lubis ⁴, Noor Izreena binti Jaslan Muhammad ⁵ Muhammad Amiruddin bin Mohd Zaiki ⁶ Joeaiza binti Juhari ⁷

^{1,2,3,4,5,6,7}Universiti Teknologi MARA Melaka Alor Gajah Campus, Alor Gajah, 78000

Malacca, Malaysia

rkhairul14@gmail.com

Abstract

This study examines the customer service practices of restaurants catering to individuals with disabilities. In today's global restaurant industry, establishments offer a diverse array of cuisines, styles, and pricing structures. Some restaurants specialize in meeting the unique needs of patrons with disabilities. However, in recent years, there have been troubling instances of certain eateries neglecting to provide accessible facilities, such as restrooms. This oversight not only deters people with disabilities from dining out but also restricts their social interactions. To address this issue, restaurants can enhance their customer service by implementing innovative solutions, including ramps, adjustable seating, braille menus, accessible restrooms, and ensuring staff members are proficient in sign language. Food serves as a universal connector, demonstrating its remarkable ability to unite people across diverse backgrounds and abilities

Keywords: People with disabilities, restaurant, service innovation.

1. INTRODUCTION

In the restaurant industry, customer service played an important role in maintaining the reputation of the company. In the restaurant business, customer satisfaction refers to the overall assessment that patrons make of the food and service during the course of their cumulative eating experiences over a prolonged period of time (Rizwan Khan, 2020). Therefore it is important for the owner to make sure that customer services of the restaurant are in top tier. Since it affects the relevancy of the restaurants, because of Internet of Things, people can comment on the restaurant anywhere regarding services, Price, ambients and more. It is crucial to take this into consideration when a operating a restaurant business, since perception of the

people reflects the restaurant reputation. Accessibility is described as the presence of routes that are usable by all individuals, including elderly and disabled people. An accessibility evaluation takes into account all of the following: safety, convenience, usability, and independence. Assuming a Cavite fast-food restaurant has acceptable physical accessibility to its consumers with disabilities according to (Edwards, Rosenbaum, Brosdahl, & Jr., 2018) Therefore, people with disabilities are not the ones that needs to neglect since they also contribute somethings to the society.

2. OBJECTIVE

According to an Accessibility Audit Study conducted by the KAED Universal Design Unit (Kudu), nearly three-quarters of the public premises assessed for accessibility in the nation received ratings of three stars or lower (Pfordten, 2023). Given this situation, business owners must prioritize the needs of people with disabilities by providing suitable accommodations, especially considering the limited attention given to them by many establishments. This business endeavors to embody the essence of Bornean cuisine, aligning with the restaurant's core values and objectives, while ensuring inclusivity by delivering exceptional services to disabled customers. Additionally, it aims to exceed their expectations by offering menu items that authentically represent Bornean cuisine's flavors through original ingredients and traditional cooking techniques. As customer satisfaction is paramount in the restaurant industry, negative feedback from clients, especially regarding inclusivity and service quality, can seriously threaten a restaurant's profitability and reputation.

3. NOVELTY & INVENTIVENESS

This company is committed to providing full inclusion and accessibility to individuals with disabilities. To ensure that everyone, regardless of illness or background, has a positive dining experience in a welcoming setting. According to an Accessibility Audit Study conducted over 11 years, nearly three-quarters of public premises in Malaysia received ratings of three stars or below in terms of accessibility for people with disabilities (OKU). The study covered a wide range of premises, including public, commercial, institutional, and religious buildings, recreational parks, outdoor facilities, transportation hubs, and health facilities (TheStar, 2023). This accessibility may be improve to enhance experience of customers with disabilities by

providing ramps, accessible bathrooms, braille menus, and adaptable furniture to accommodate the needs of all guests.

4. PRACTICALITY & USEFULNESS

The business also offered accessibility features, such as ramps that can be used by a wheelchair user and toilets that are equipped with grab bars and are spacious to assist people with disabilities when going to the toilet, adaptable furnitures that can be used by people with disabilities, providing options to accommodate wheelchairs and different seating preferences to satisfy their desires and give extra comfort, and providing braille menus for individuals with visual impairments.

5. CONCLUSION

In conclusion, it is indisputable that Malaysia needs restaurants that offer accessibility for people with disabilities. People with different abilities are part of the nation's diverse population, and they should have equal access to dining experiences. Sadly, the lack of accessibility at many restaurants presents serious obstacles for individuals with disabilities, limiting their ability to participate in social activities and jeopardizing their rights. Prioritizing the installation of handicapped-accessible amenities like ramps, wide doorways, and accessible restrooms allows businesses to show their dedication to inclusivity and diversity while also meeting regulatory requirements. In addition, meeting the needs of people with disabilities broadens the clientele, enhances one's brand, and advances social justice. As a result, providing accessible eating options for people with disabilities in restaurants is not simply required by law but also a moral need that enhances Malaysia's dining scene and fosters social cohesion.

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