

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

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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 Umami 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 (MIIEEX), 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.

MIIEEX 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 MIIEEX 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

COMMITTEE	NAME
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	RASEEDA BINTI HAMZAH
	TS. DR. NOR AFIRDAUS BINTI ZAINAL ABIDIN
DESIGN & MULTIMEDIA	EN RASHIDY SAMSUDIN
	RIDZUAN ADLI BIN AZIDIN
	WAN NUR KHALISAH SHAMSUDIN
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	PN AFZAN NOR BINTI TALIB
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	PN NASHRAH BINTI TALIB
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	SITI NURSYAHIRA ZAINUDIN
	BUSHRA ABDUL HALIM
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	PN MAYMUNAH ISMAIL
	PN NOR HALAWAH AHMAD
	PN AZIRA RAHIM
	NORLINDA TENDOT ABU BAKAR
	AFZAN SHAHILLA AMIR HAMZAH
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	SITI MARIAM ALI
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	MASLIZA BINTI MOHD RAZALI
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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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Universal Game Cards (Investment Edition)

Nor Shafikah¹, NurHasleen¹, Nur Amiera¹, Nur Afrinna Hanani¹, Wan Nur Maizatun¹,
Mohammad Norafiq Nabil¹, Nor Shahrina Mohd Rafien¹

Faculty of Business and Management, Universiti Teknologi MARA
(UiTM) Melaka, Malacca City Campus, 75300 Melaka, Malaysia

2022698086@student.uitm.edu.my

Abstract

This Universal Game Card is a game with the educational purpose in investment which is specifically designed for people with disabilities for adults. On special relevance are speech and occupational treatments for people with disabilities are very crucial especially when they want to be depending on their own when financing their own money without relying on their guardian especially the parents. In addition, the Universal Game Card is designed to cater to individuals with visual impairments, making it simpler for them to get latest information about investment in a variety of different ways. Through the incorporation of braille, our creative do not only assures accessibility for those who are in need but also efficiently conveys information, which makes it a helpful tool for a different group of people. Moreover, it will be fostering financial literacy to fostering financial literacy, Universal Game Card also assists in the promotion of social integration and equality through the way it works and emphasis on accessibility.

Keywords: Disabilities, Board Game, Investment, Accessibility

1. INTRODUCTION

The Universal Game Card (Investment Edition) stands as a testament to inclusivity in the financial sector, offering a tailored solution for individuals with disabilities, known as OKU (Orang Kurang Upaya). This innovative card not only provides access to investment opportunities but also addresses the unique needs and challenges faced by OKU individuals in the financial realm. By fostering financial independence and inclusion, the Universal Game Card (Investment Edition) strives to empower OK individuals to actively participate in wealth-

building activities, thereby enhancing their overall financial well-being and societal integration. On this universal card, there are questions and Braille for blind people to play along with other people and the topic is about investment. This topic is to acknowledge people on talking investment in their daily basis by making them think if this kind of investment is good for them..

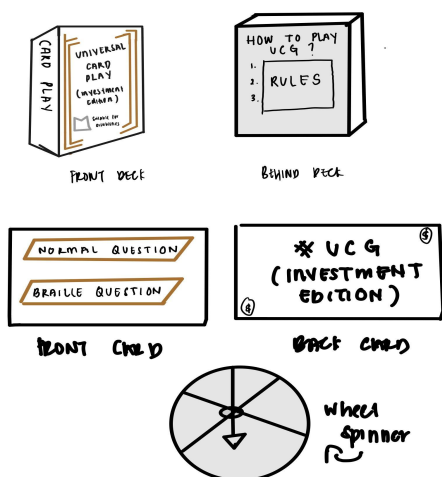
2. OBJECTIVE

The objective of our innovation which is the Universal Game Card is it can be accessed by different group of people either normal people or disabled normal people and individuals with disabilities. We focus on visual impairments because we provide braille to convey information effectively. This is to ensure they are easily to learn a new new information about investment with a new approach or method is Universal Game Card them to easily learn new information about investment in new ways which is from this Universal Game Card. In addition, we want to assist more individuals with disabilities know how to do investment for the future.

3. NOVELTY & INVENTIVENESS

Unlike standard game cards, the Universal Game Card was designed specifically for people with disabilities with an emphasis on education to improve user understanding about investment. Our Universal Game Card is new because it is comprehensive, it may be used by those without disabilities as well as those with disabilities, especially those who are incapable of seeing. Our innovative approach ensures accessibility for all users by effectively conveying information through the integration of braille. This strategy breaks down obstacles and encourages equal participation while also encouraging people to learn while playing games and a more equitable game experience. Our Game Play Card stands out for its unique combination of creativity and accessibility, which makes it a useful tool for a range of communities.

4. PRACTICALITY & USEFULNESS



This universal card has 15 pieces, and different cards have different questions about investment. The card will be like a flash card but with envelopes which the envelopes will be about questions that need to be answered and the cards will be the explanation of the question. This game need the players to think and imagine different kind of scenarios if they in a situation about the game. Next we given the player spinner wheel to help them find who is the player for next turn. This are some kind of examples and question:

1. **Envelopes:** Do you prefer what Risk Return Trade Off?
Front Card: risk-return tradeoff is relationship between the potential return. Higher returns are associated with higher levels of risk, and conversely, lower levels of risk are typically associated with lower potential returns.
2. **Envelopes:** Does credit score important?
Front Card: credit score is a numerical representation of an individual's creditworthiness, typically ranging from 300 to 850. It is calculated based on various factors such as payment history, credit utilization, length of credit history. A high credit score indicates a strong credit history and responsible financial behavior,
3. **Envelopes:** What is diversification, and why is it important in investment portfolios?
Front Card: Diversification is a risk management strategy that involves spreading investments across different asset classes. The goal of diversification is to minimize the impact of market fluctuations and specific risks on the overall performance of an investment portfolio.
4. **Envelopes:** What is value investing ?
Front Card: Value investing is an investment strategy that involves buying securities that are considered undervalued relative to their intrinsic worth or fundamental value.

Moreover, This flash card will have brailled in the bottom to help OKU(Orang Kuramg Upaya) to play together. The back of the deck will be put the rules on how to play the game and give the right direction for the player to play.

5. CONCLUSION

The Universal Play Card represents a groundbreaking step towards financial inclusion and education, particularly for individuals with disabilities. By integrating Braille and accessible design, this innovative card ensures that everyone, regardless of ability, can participate in and benefit from investment education and gameplay. Through its comprehensive approach and emphasis on accessibility, the Universal Play Card not only fosters financial literacy but also promotes social integration and equality. With its practical design and educational content, this card serves as a valuable tool for empowering individuals with disabilities to take control of their financial futures.

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