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V-MIEX

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VIRTUAL-MELAKA INTERNATIONAL INTELLECTUAL EXPOSITION

ROAD TO COMMERCIALISATION

V-MIEX BOOK



V - MIIEX BOOK

'ROAD TO COMMERCIALISATION'

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FOREWORD

ASSOC. PROF TS. DR MOHD RASDI ZAINI
Rector
Universiti Teknologi MARA (UiTM) Cawangan Melaka



Welcome to Virtual-Melaka International Intellectual Exposition 2022 (V-MIIEEX 2022). It is an honour for me on behalf of UiTM Melaka Branch to thank all of you for joining the programme and we are proud to inform you that this is the 12th year consecutively, UiTM Melaka Branch is organizing this exposition.

V-MIIEEX 2022 is a platform to improve the commercialization collaboration among industries and communities and at the same time, we also give the opportunity to academicians and students to share ideas and increase their potential innovation products with the industries and communities through their projects. This exposition also serves as a platform to cultivate and upload the nation's innovation culture by presenting new ideas and research by young people, especially from academia, universities, college, high schools, and primary school students.

The economy and development of the country faced a challenging phase in 2021 due to the Covid-19 pandemic. We faced changes in business, education, society, and lifestyle. However, the pandemic proved to be a blessing in disguise as it somehow gave people ideas which would be beneficial to improve their lifestyle and solve problems that might occur in the future. Besides, 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 the "Research, Innovation and Commercialization", this exhibition is organized to encourage more commercialization of products that are beneficial to scholars, industries, and communities to tackle such issues to improve our present and future life.

Since 2009, UiTM Melaka Branch has successfully become the organizer for this innovation exposition. We are not only successful in organizing the exposition, but I would proudly say that we have also successfully embarked on commercialized products. With the number of participants for this year's exhibition, we believe that more commercialized products will be produced in line with the theme for this year, "Road to Commercialisation".

This exposition would never happen without dedication, teamwork, and commitment. A round of applause should be given to the committee teams as 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.



DR. NUR HAYATI BINTI ABD RAHMAN
Deputy Rector Research & Industrial Linkages
Universiti Teknologi MARA (UiTM) Cawangan Melaka

It is a great pleasure to welcome all the participants and presenters to the Virtual Melaka International Intellectual Exposition (VMIIEX 22). I am delighted that through this periodic event, we managed to bring together scholars and professionals from various fields to engage through this virtual platform where ideas and breakthrough are discovered and leveraged for commercialization potential.

Since 2009 UiTM Cawangan Melaka has held twelve Invention and Innovation Design competitions and this year we are very honoured to have the second year of VMIIEX organized in digital platform. This has proven that despite the global challenges due to the recent pandemic, it is never an issue for UiTM Melaka to continuously organize this yearly prestigious event and to support the ministry's aspiration in leveraging creativity and innovation in the new norm.

VMIIEX 22 is organized with no sole objectives of accomplishing the University's KPI but instead we are determined to make this programme as the place to help heighten commercialization collaboration in research and innovation with the industry and community through joint exhibitions from various external organizations.

Our aspiration is to also provide exposure and opportunities to academic staff as well as students from public and private universities to engage in direct excellent scholarly activities with the industry and community through activities that can be measured and assessed. As for the Research and Industrial Linkages Office of UiTM Melaka, this exhibition is seen as the platform that can encourage active collaboration and knowledge transfer with industries; objectively to support various activities that will benefit all stakeholders from the various government agencies, local and international universities, industries and communities.

Through the theme of "Road to Commercialization" this year, V-MIIEX 22 is committed to have this event as a boulevard to inspire and cultivate creativity and innovation to the numerous levels of inventors through exposure on latest technologies, astonishing ideas and creative designs with great potential to be commercialized. For this year, we proudly introduce a special category which is the "Endemic Challenge" as the provision to the government of Malaysia's goal of moving towards the endemic.

To ensure that the competing products in this exhibition is not exclusively for the purpose of competition, V-MIIEX 22 is dedicated for the commercialization of highly potential innovation products, which is attained through its active collaboration with tailored needs industries. The commercialization effort was not for income generation purpose only but it aimed to spearhead the development of quality products in line with industrial needs and community benefit.

Therefore, it is a great honour for me on behalf of the Research and Industrial Linkages Office as well as the organizing committee to have all participants in this competition and I would like to express my highest gratitude especially to the Rector of UiTM Melaka and all strategic partners and sponsors for supporting the event.

To finish, I sincerely wish VMIIEX 22 a remarkable success. I believe that this will not be the only collaboration between UiTM Melaka and the respective partners and linkages, but a beginning of a long and fruitful cooperation in future.

Thank you very much.

road to commercialisation...

WAN HASMAT WAN HASAN
Project Director V-MIIEEX 2022
Universiti Teknologi MARA (UiTM) Cawangan Melaka



Assalamualaikum and Warmest Greetings.

It gives me an enormous pleasure, on behalf of the organizing committee to welcome all participants and presenters to the Virtual -Melaka International Intellectual Exposition 2022 (VMIIEX '22) with the theme "Road to Commercialisation". We are honoured and glad to welcome all participants to this biennial event.

This is the second time that we have organized this biennial event virtually. V-MIIEEX 22 is an innovation competition, in which, innovation products, ideas and systems related to various science and technological fields are exhibited as a solution for the presented problems.

V-MIIEEX22 expectantly will be a platform that gathers experts from academies, scientists, and researchers, locally and internationally, to contribute towards the growth of scientific and technological knowledge in each participant's specialisation and expertise.

The competition also serves as a platform to give fresh exposure to the various level of inventors, as well as to encourage the culture of innovation design focused on latest technologies and related to new norms technologies and inventions due to COVID-19.

V-MIIEEX 22 is also hoped to be an avenue for gathering and disseminating the latest knowledge on ideas and acquisition of innovation among the participants. It is hoped that the competition will be able to open the mind of the participants towards latest technologies and design. It is also in line with the government's aspiration to encourage innovation activities in Malaysia.

As a final note, I would like to congratulate my fellow committee members for their tremendous effort, which have been critical to the event's success. In addition, I would like to thank our co-organizer, event sponsors and supporters. Optimistically, we wish that all new knowledge that is discovered, invented, or innovated will drive towards our future sustainability.

Thank you.

ABOUT V-MIIEEX

The world after COVID-19 is unlikely to return to the world that was. Despite the challenging pace during the pandemic, the strong rebound is expecting in this exciting year 2022. Malaysia is welcoming the great prospects ahead with positive impact on the country's economy and development. Hence, the hope for greater opportunities motivates for more creative thinkers to come up with innovative ideas that can be put forward to be harnessed to overcome similar problems in the future. V-MIIEEx 2022 is one of these platforms which contribute relevant ideas that could help communities of all walks of life cope with this pandemic.

UiTM has identified research, innovation, and commercialization to be among the core components and strategic effort towards becoming a well-known and prominent university. Aside from realizing this goal, with these components and efforts, fostering the development of knowledge, generating financial stability of the university, and producing knowledgeable academicians are also potentially achievable.

By having invention and innovation competition yearly, UiTM Cawangan Melaka is confident that it could further enhance creative and innovative abilities among staff and students. In support of the government notion which upholds the importance of innovation, UiTM Cawangan Melaka has taken the initiative of organising the Virtual Melaka International Intellectual Exposition (V-MIIEEx).

In instigating and nurturing the continuous culture of inventing and innovating, this event is an ideal platform for lecturers, administrative staff, students, and the public to showcase and commercialize their products or prototypes as well as novel ideas. The first IID which was held nationally in UiTM Cawangan Melaka in 2009, has successfully gathered and displayed more than 37 inventions and innovations. Accordingly, to continue this strong passion towards inventing and innovating, the IID competition should be continued and celebrated.

With that, the Division of Research and Industrial Linkages will be organising its 12th IID competition, the Virtual - Melaka International Intellectual Exposition (V-MIIEEx 2022) with the theme, 'Road To Commercialisation'. V-MIIEEx 2022 hopes to welcome 200 competing products to be showcased and commercialized, at the same time, attract attention of related and matching industry.

Objectives

1. Encourage and instill 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 skillful 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.

4D_Scannable EmergencyNecklace

Tasya Musfirah binti Ma'aulut¹, Nur Zulaika binti Abdullah², Siti Nur Azierah binti Azri³, Syaznie Nadhira binti Mohd Asri⁴, Amir Faiz bin Abdul Hadi⁵, Maizatul saadiah binti Mohammad⁶, Khaizie Sazimah binti Ahmad⁷

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Abstract.

We designed and distribute a dual-functionality device primarily for women. It is designed to protect the wearer by pressing a button on the necklace's pendant. The unique of this product, it can be as memory card by only scannable the information and it will save our data. Despite the large number of incidents involving women that have occurred in Malaysia for a long time, we discovered that Malaysia still does not practise carrying safety equipment or devices while out in public. Women must be both safeguarded and self-sufficient. This is why we carried out research to create the “4D_Scannable Emergency Necklace” product. The function is for emergency situations, as implied by the name. Women are more prone to anxiety and panic, especially when they are alone in public. They are constantly threatened and pursued, so the function of our product allows the user to summon assistance by pressing a button on the necklace pendant, which produces a loud sound that naturally draws the attention of the public. This device is extremely useful for women who want to feel safe while walking alone, as well as for mothers who want to get it for their children due to the possibility of bad things happening in schools. On the other hand, our product advertisement makes use of social media, which is the simplest way to reach billions of people and facilitate marketing. We can be reached via Instagram, Tiktok, and Facebook. We assumed that because our product would be sold on these online platforms, it would be able to go international. Furthermore, Shopee is one of the largest business platforms in Southeast Asia. It is a website for online shopping.

Keywords: 4D, Scannable Necklace, Emergency Necklace, South Asia

1. INTRODUCTION

A necklace is one of the most used items for ladies to complete their apparel appearance to make them seem beautiful and lovely. The dazzling metal that comes from the necklace is what makes someone seem fascinating and luxurious. However, individuals are now reluctant to exhibit their accessories in public due to numerous unpleasant causes such as harassment and robbery. To make it a high-safety stylish item for ladies to wear, we chose to create some innovation by using our creativity and an exciting current aspect in terms of technology in the manufacture of this 4Ds previously said, individuals prefer to avoid wearing and displaying their accessories for a variety of reasons, and as a result, we conducted some studies to develop a dual-functionality necklace primarily as a safety protection device. Our Emergency Necklace is designed to safeguard anyone who wearing it when they find themselves in danger. For example, they may push the little button on the peasant, which will emit a loud sound. Women who travel and stroll alone now will experience less distress.

2. OBJECTIVE

We aim to be the world's top manufacturer of fashionable, functional, and high-quality emergency necklaces. This will be accomplished via the participation and efforts of all partners in promoting the company. We anticipate that our company will expand shortly, as a result of the new invention of our Emergency Necklace, which will raise demand not only for special occasions but also as a possible new everyday safety device. This will provide additional benefits that will make our product more lucrative and reliable over time. Our company will be dedicated to our mission which is to be customers' first choice in selecting high functionality and fashionable Emergency Necklaces. Moreover, we will also be committed in producing high-quality Emergency Necklaces which will ensure the safety and satisfaction among customers. For that matter, we will be aware of and attentive to client feedback. We believed that this is one of the most important steps where we could continuously develop and upgrade our products and services.

3. NOVELTY & INVENTIVENESS

The purpose of our product is to help ladies feel at ease while walking and travelling alone. Society faces several risks, particularly to women. We realised that Malaysia still has limited access to women's protection equipment. Therefore, women must rely on something to protect them in public. Thus, our innovative device may minimize negative outcomes. Our necklace, the Emergency Necklace, resembles a regular necklace to mask the wearer's motive for wearing it in public; yet, the necklace's distinguishing characteristic is that it may protect the wearer from harm. This is due to the fact that our necklace is equipped with an emergency button that emits a loud noise when pressed. Due to its functional design, it is undoubtedly a safety device. In addition, it is ideal for people of different ages, religions, incomes, and ethnicities. Our product is constructed with durable materials, allowing it to be used for an extended length of time.

4. PRACTICALITY & USEFULNESS

This Product is used for keeping you safe when you are outside alone, especially for women. We are living in a modern society in which women are also required to work to live their life as they want. Unfortunately, various problems are faced by women, as an example of sexual harassment that is rampant in the country. The use of our Emergency Necklace is very practical since when we are feeling anxious and panic, our brain will not work properly to think about how to save ourselves when we are in danger. By using our Emergency Necklace, you can save your life or be able to make an early deterrent before things get worse. All they need to do is, press the button on the necklace, and it will emit a loud sound which actually can alert anyone around them. Other than that, we all know that majority of women love jewellery, so our product will maintain the desires of women while being their saviour in times of emergency.

5. CONCLUSION

To conclude, our lovely necklace attempts to realise a woman's ideal of living in a safer environment wherever she goes. In creating this product, we are also attempting to reach a target market that is consistent with modern marketing practices and accomplish our objective. Subsequently, ladies will not have to spend a lot of money on a safety device since our product, the Emergency Necklace, is not simply a piece of jewellery but also serves as a safety device for anyone who wears it. Our products will hopefully lessen the number of horrifying situations

affecting women. In addition, we want to instil ladies with the courage to go alone in a secluded area. Lastly, we believe that women will be able to take greater care of their safety in the future with the aid of our Emergency Necklace.

REFERENCE

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