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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.

Oh! Pop Sanitizer

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Abstract

Hand hygiene is essential as it is easily contaminated through direct contact with airborne microorganisms through coughing and sneezing. It is crucial to disrupting the transmission chain of the virus by the practice of proper hand sanitization, particularly in the state of the 'transition to endemic' phase. The success of hand sanitization depends on effective hand disinfectant agents formulated in various types and forms, such as antimicrobial soaps, alcohol, water-based, and gel-based hand sanitizers. The use of hand sanitizer is declining due to entering the endemic phase. Some people suffer from dry skin due to the high alcohol content in the sanitizer and often do not carry hand sanitizer anywhere. Oh! Pop Sanitizer is created to help to be effective in fighting coronavirus. The objective of Oh! Pop Sanitizer is to make it easier for customers to use hand sanitizer anywhere, ensure customers' hand hygiene is maintained, and solve customers who find it challenging to carry a bottle of hand sanitizer. Oh! Pop Sanitizer has a dual function either as a hand sanitizer, suitable for all skin types of susceptible skin or as a pop socket that can hold the telephone more easily while walking, scrolling, or taking photos. Oh! Pop Sanitizer intends to submit a copyright application soon because it has its function advantage. Also, it can attract consumers, especially mobile phone users and gadget accessories fans, because of its unique design, latest patterns, and eco friendly.

Keywords: Hand Sanitizer, Pop Sockets, Endemic, Hygiene, Mobile Phone

1. INTRODUCTION

Our company, Oh! Pop Enterprise has made a detailed discussion to produce a product that can benefit the public during this endemic phase. Many countries have set various SOPs (Standard Operating Procedures) to fight the COVID-19 virus and reduce the country's daily case rate. Among the SOPs that have been developed are the use of face masks and social distance. However, when the country was making the transition to an endemic phase, several SOPs were reduced, and most European countries have stopped the norm of wearing face masks in public places. Even so, the public should protect themselves from being infected with the Covid-19 virus by wearing a face mask, keeping a social distance, and using hand sanitizer. The product that our company produces is Oh! Pop Sanitizer.

Oh! Pop Sanitizer is an innovation that combines a pop socket with a hand sanitizer. The phone's pop socket is popular among young people since it looks attractive and offers multiple functions, such as functioning as a telephone stand and preventing the phone from slipping while in use. Pop sockets for phones are marketed everywhere, and they come in a variety of colors and designs that attract buyers to purchase them. Hand sanitizers are also essential during this time since they are used to kill germs, bacteria, and viruses. When there is no access to water or soap, hand sanitizer may be used to keep hands clean and germ-free. The demand for

hand sanitizer in hand hygiene products continues to rise due to the widespread opinion that hand sanitizer is very crucial to their health and wellbeing. Furthermore, the product that we intend to produce is not yet available on the market. This is an excellent chance for us to market Oh! Pop Sanitizer.

2. OBJECTIVE

1. To facilitate customers' hand sanitizer usage anywhere since their mobile phones are constantly there with them.
2. To ensure customers' hand hygiene is maintained in public places.
3. A perfect solution for customers who find it inconvenient to carry a bottle of hand sanitizers.

3. NOVELTY & INVENTIVENESS

This innovative product is to facilitate the community to encourage self-cleaning practice at anytime and anywhere especially during the 'transition to endemic' phase. Oh! Pop Sanitizer is an innovative product with a pop socket that contains hand sanitizer. This is easy to carry everywhere because it is patched with mobile phones, lightweight and compact. You can use hand sanitizer wherever you are and can maintain personal hygiene. Besides, Oh! Pop Sanitizer is suitable for all skin types because it is alcohol-free sanitizer gel formulated for all skin, especially for sensitive skin. Oh! Pop Sanitizer is a gel-based hand sanitizer and contains various vitamins from B3, B5, C, E, and B6 to ensure skin keep healthy.

4. PRACTICALITY & USEFULLNESS

The combination of a pop socket with a hand sanitizer for mobile phones has an ideal design and is suitable for storage, and there is no need to carry the hand sanitizer separately. This pop sanitizer is ideal for individuals who use a mobile phone and ensures that users always sanitize their hands after touching things, especially those who use public transportation and usually communicate online through mobile phone. So, Oh! Pop Sanitizer can use anytime and anywhere. Besides, this product has a variety of desired designs to impress people to buy our pop sockets, especially when they can personalize their designs based on their preferences.

5. CONCLUSION

This innovative product will help our community encourage self-cleaning routines anytime and from any place. We are also focused on helping reduce the chances of people getting virus Covid-19. In addition, Oh! Pop Sanitizer is the first innovative product in our country that combines a hand sanitizer with a mobile phone pop socket and it is suitable and safe for all skin types. Moreover, our products are designed as accessories for smartphone users, you can take them wherever you want. We believe that with the uniqueness and advantages of our products, it can differentiate ourselves from other competitors, and our team will be able to meet the demands of our users.