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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.

Handy Lanyard

Norfadzilah Amirah Binti Mohammad Fadzli¹, Nur Adibah Binti Ab Malek², Nazirah Binti Yaacob³, Nadia Nisa Binti Mohd Nor Shuhaimi⁴, Wan Hasmah Binti Wan Hasan⁵

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Abstract

After nearly two years of combating the pandemic, the transition to the endemic phase is an exit strategy that will let Malaysians resume their normal lives. This phase helped business owners satisfy the needs and wants of customers. We at Urban Space Ent could not let this chance pass us by, therefore we took care of the problems that students and employees had on a daily basis with our product innovation, the Handy Lanyard. Allowing you to get rid of the clutter in your life is our most important objective. The Handy Lanyard has two anatomical components: the lanyard strap, which represents the cable, and the lanyard body, which functions as a mini power bank and refilling spray container for hand sanitizer. When it comes to the lanyard's body, we solely utilized lightweight and durable materials. The lanyard cable, on the other hand, is constructed from materials such as ABS and polyester, which do not tangle as easily as other materials. The functionality provided by the Handy Lanyard makes life easier and more convenient. Due to its versatility, customers can use it as both a lanyard and a power bank with a refillable hand sanitizer spray container that can be brought anytime and everywhere. Purchasing this item is a no-brainer, especially in light of the current endemic situation. Our goal is to create a one-of-a-kind product for Malaysia and, preferably, the world. It is also the objective of our company: to supply consumers with new solutions based on timeless, high-quality products that can be used by everyone.

Keywords: Handy, Lanyard, Multipurpose, Powerbank, Endemic

1. INTRODUCTION

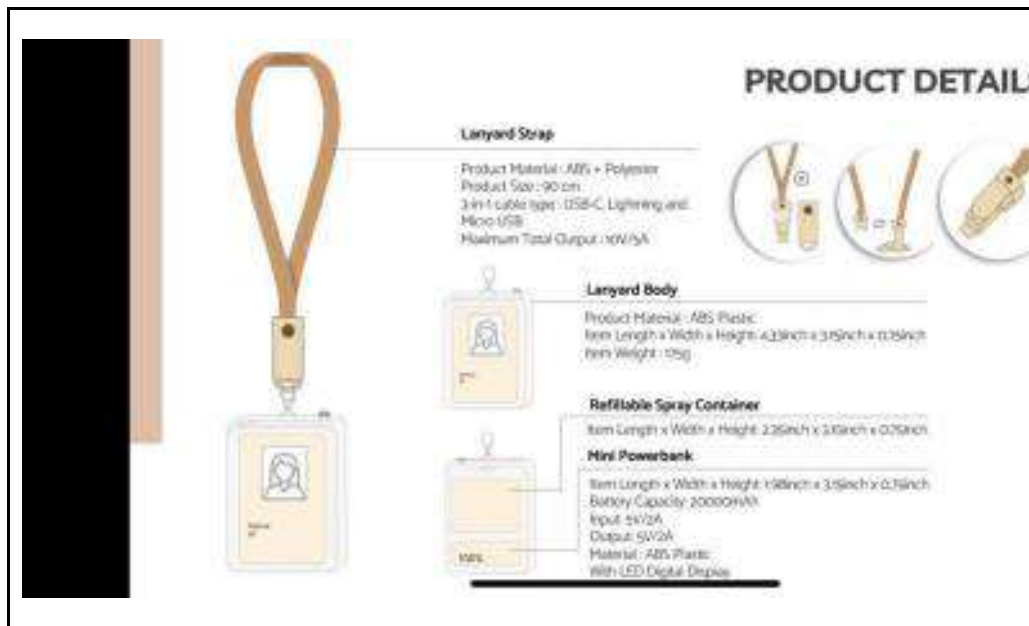
According to Edge Markets, Covid-19 has entered the endemic phase in Malaysia. This also meant that all limitations on company operation hours were lifted, students may return to physical classes, and religious events were permitted without the need for physical distance. After nearly two years of fighting the pandemic, our Prime Minister, Datuk Seri Ismail Sabri Yaakob, stated that the transition to the endemic phase is an exit strategy that will allow Malaysians to return to a virtually normal existence. This endemic Covid-19 period brought up a world of opportunity for company owners to address the increasing wants of consumers. Urban Space Ent cannot afford to miss this chance, thus we created a solution that is congruent with this endemic period and designed to alleviate worker and student concerns on a daily basis. Our mission is to develop unique products in Malaysia and, ideally, the entire world. And our company's vision is to supply consumers with unique solutions consisting of timeless, high-quality materials that can be utilized by everyone.

2. OBJECTIVE

We create a versatile product which is the Handy Lanyard that will make everyone's lives easier by eliminating the need to worry about disorganized and overloaded bags, as well as cumbersome items to use in their daily activities. Handy Lanyard aims to facilitate workers and students in using their

multiple essentials in a very simple yet helpful lanyard. This lanyard provides wearable lanyard cable which comprises three types which is Micro USB, USB-C and Lightning Cable. This lanyard cable comes together with its body that can be unattached. The unique part of its body is that it contains a mini power bank together with a refillable spray container for the user to fill their hand sanitizer. It also allows users to put their ID or any card to be displayed on the other side of the lanyard body. It is designed specially to help in saving space and makes the user more organized.

3. NOVELTY & INVENTIVENESS



The Anatomy and Product Details

As the world becomes endemic to Covid-19, the use of hand sanitizer remains one of the essential things to bring it anywhere for precautions. As we greatly hand sanitizer everywhere, we came out with an innovative product of four combinations which are lanyard strap, refillable spray hand sanitizer, mini power bank and id card holder. See that all the things we combine are important things that most people use everyday and bring them anywhere. Thus, handy lanyards are designed to meet our target market which are workers and students.

Handy lanyards can be divided into two anatomy. First part is the lanyard strap that represents the cable while the lanyard body that carries out as a mini power bank and refillable spray

container. Light and durable material are chosen for this innovative product to make sure it is lightweight to hang around the neck. For the lanyard strap, the material that we use is not the typical or normal strap that we have in the market. But it is made from Acrylonitrile Butadiene Styrene (ABS) and polyester so that it is not easily tangled for our lanyard cable. The cables with a maximum total output; 10V/5A are placed at the end of the lanyard. The size of the lanyard will be a perfect size for Asian people especially for Malaysians.

For the lanyard body part, we choose ABS Plastic for the material with the weight 175g only. With the combination of three items which are id card holder, refillable spray container and mini power bank, it is not too heavy although it hangs around the neck and does not cause neck pain at all. At the mini power bank compartments, we provide LED Digital Display to show the remaining battery of the

power bank. Refillable spray container for hand sanitizer placed behind the id card and the size is one over three smaller than the id card compartment. Users may refill hand sanitizer and use it all day. Every feature and materials of the products are the best quality to keep it safe to use and comfortable hanging it.

4. PRACTICALITY & USEFULNESS

Our company, Urban Space, released the idea to manufacture and produce a product more practical that can be used by everyone. In virtue of the company's mission, we want to provide the best innovative products with high quality and bring bright to the consumers. Handy lanyard can be users' new favorite essential accessory as it provides several solutions that will make your life more trouble-free. It is because of its multipurpose function where it not only allows you to have a wearable lanyard cable but also can work as your mini power bank that is attached with a refillable spray container for your hand sanitizer.

There are three types of cable that we provide which are Type C connector, USB Connector and Lightning Cable for Apple devices. Therefore, consumers may choose their own preference type of cable according to their smartphone. To charge via the Lightning cable, the Micro USB/Lightning Combo Connector is placed with the gold prongs face down into the charging port for the Apple device. While to charge via the Type C Connector or Micro USB Connector, simply place the connector piece into the charging ports as normal. Carabiner style clip at the bottom of the cable to hold the other part of our lanyard piece. For the body part of our lanyard piece, it works to display users id, access card, badge etc. People can recharge their devices through the charging port by using a power bank that combines at the body part. The most important thing is customers can refill hand sanitizer on the top of the lanyard body and always keep sanitizing their hand in this endemic.

5. CONCLUSION

In keeping with our vision and mission of creating unique products for Malaysia and, ideally, the world, as well as providing consumers with new solutions based on timeless, high-quality products, we are confident that our product will win anyone's heart. This can be accomplished by utilizing our unique ideas, inventiveness, and best efforts to create a product that is practical, beneficial, and convenient for everyone to use. Our organization will continue to improve and grow in order to become a successful name in the industry.