



V - MIEX BOOK 'ROAD TO COMMERCIALISATION'

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

Welcome to Virtual-Melaka International Intellectual Exposition 2022 (V-MIIEX 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-MIIEX 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.

road to commercialisation ...





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.

roal to commercialization





WAN HASMAT WAN HASAN Project Director V-MIIEX 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-MIIEX 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-MIIEX22 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-MIIEX 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.



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-MIIEx 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-MIIEx).

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-MIIEx 2022) with the theme, 'Road To Commercialisation'. V-MIIEx 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.

EF Fold (Folding Machine)

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Abstract

According to the Department of Statistic Malaysia Official Portal, in 2021 as many as 55.1 % or 6.23 million women are no longer housewives, they prefer to work due to the increasingly worrying economy in Malaysia. Working women, on the other hand, frequently have difficulty performing their responsibilities at home flawlessly because they also have chores at work to do. When you have small children who require constant attention and care, the task becomes more difficult. They must also fulfill obligations at home, such as cleaning and cooking. Those with large families will also definitely have trouble tidying up the house especially folding clothes. Therefore, EF Fold aims for wives or women who work to use our product which is a folding machine that makes it easier for them to fold a lot of clothes in a short time. Easyfold is the only one that has innovated this product with a new version that became a hot trending topic in business after its launch. Easyfold machine can save time for wives, especially those who are busy working because this machine can fold 40 clothes in 8 minutes. Our machines will also be marketed at a reasonable price so that everyone regardless of the upper or lower class afford our machines.

Keywords: Folding, Machine, Clothes, Saving time

1. INTRODUCTION

Observations were conducted on some customers who find it difficult to find time to manage things at home despite having a career. According to the observations, they said it was too tiring to do work at home after a day of work. The situation is technically getting worse, and we found a solution to solve their problem with the Easyfold folding machine. Hence, anyone who is already married can teach their children to help their parents do chores at home with the help of Easyfold's folding machine. With the help of this folding machine, there is no more stress and problems due to seeing clothes that are not folded.

2. OBJECTIVE

Easyfold's aim is to serve by providing dedicated, efficient, and disciplined management with the assistance of our support team to ensure the smooth operation of the business and to increase profits by expanding the product market to the entire country and assisting those who are busy with work and do not have enough time to fold their clothes. Easyfold Enterprise invests in research and development (R & D) to improve product quality and ensure that our products always meet the most recent requirements and customer satisfaction.

3. NOVELTY & INVENTIVENESS

EasyFold Enterprise created the EF Fold folding machine. This product was designed to help housewives and people who work long hours fold their clothes more quickly and efficiently. To begin with, our product, Easyfold has distinct features and superior quality when compared to other folding machines. To put it another way, our machines can solve the problem of people using folding machines. Automatic wrinkle sensing and Wi-Fi connectivity allow you to remotely start and receive alerts from your smartphone using the SmartThings App, making it easier for our customers to use our machines.

4. PRACTICALITY & USEFULNESS

Our product, Easyfold has the advantage of being able to proceed with something without difficulty. We always remind our employees that "the services of Easyfold's products should be performed at the customer's convenience". Our company, Easyfold Enterprise provides a reasonable price, particularly for house needs, while also providing quality material for our machines. Finally, our customers can save time by eliminating distractions between work and home while still enjoying their activities.

5. CONCLUSION

While a career is important in life, we also need to manage our homes effectively. Finally, because of too busy working, a wife rarely has time to fold the clothes. This folding machine is ideal for working women who need help folding their family's clothes. This machine is worthwhile to get because it will make life easier for the entire family, especially the mother and it is also kid-friendly, so it is safe to use.

REFERENCES

FoldiMate, a fully functional machine that folds your clothes. Designboom. (2019). Retrieved June 5, 2022, from https://www.designboom.com/technology/foldimate-folding-clothes machine-01-07-2019

Liu, Yiwei, Tran, Dung, and Wang Kexin, "Cloth Folding Machine". (2017). *Mechanical Engineering Design Project Class*. 66. Retrieved June 5, 2022, from https://openscholarship.wustl.edu/mems411/66

Population Statistics. Department of Statistics Malaysia Official Portal. (n.d.). Retrieved from, https://www.dosm.gov.my/v1/index.php?r=column%2Fcthree&menu_id=UmtzQ1pK Z HBjY1hVZE95R3RnR0Y4QT09