



UNIVERSITI
TEKNOLOGI
MARA

Universiti Melaka

V-MIEX

28 JUNE
06 JULY
2022

VIRTUAL-MELAKA INTERNATIONAL INTELLECTUAL EXPOSITION

ROAD TO COMMERCIALISATION

V-MIEX BOOK



V - MIIEX BOOK

'ROAD TO COMMERCIALISATION'

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PUBLISHED BY:

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Website: <https://www.miiex.my/>
ISBN: 978-967-2846-04-8

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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.

JANNS LAPTOP STANDGER

Nurul Akma An Najwa Binti Ramli¹, Alifah Ilyana Binti Mohd Rafi², Jassinta A/P Laser³, Nur Syahira Binti Mohd Fadzilla⁴, Siti Sarah Binti Mohd Adaha⁵, Siti Nazirah Binti Omar⁶

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Abstract

Advances in technology have bribed new lifestyles in addition to dynamic consumer tastes. The problem with the traditional laptop charger, its heavy and messy components lacks mobility and takes a long time to charge as well as easily can be damaged over time. Moreover, wireless chargers in the market still are not able to maximize the needs of users in one product.

Our objective is to offer the users greater convenience that they could not have while using the traditional charger, reduce risk, less damage, and a more organized workplace. Therefore, JANNS Laptop Standger is designed to meet the needs of solving those problems. From the use of material and advanced components to its on-the-go function, we ensure that JANNS Laptop Standger is of top-notch quality so that it will always bring benefit to others.

JANNS Laptop Standger is expected to give impact those who utilize a computer in their daily lives. They could do their jobs anytime and anywhere without worrying about where they are going to charge their laptop. Besides, industrial production in Malaysia is forecast to outpace economic growth by 6.9% in 2022 before increasing to 5.8% growth in 2023 (Industry - Country Industry Forecasts - Malaysia, n.d.). After SWOT analysis in this COVID-19 situation, seemingly, the strength of this product is the package of functionality itself and very potential for golden opportunities to grow bigger such as partnering with a well-known electrical company.

Keywords: JANNS Laptop Standger, Greater Convenience, Top-Notch Quality, Package Of Functionality

1. INTRODUCTION

As we are living in the era where technology is very crucial in our daily life, we propose to you the most companion laptop standger for you to bring anywhere you go. This precious laptop standger is the first innovation project made by JANNS.co. The features of our laptop standger make people's life easier as it can be described as an all-in-one. After some research and development, JANNS.co has designed the greatest solution for every laptop user. The design has gone through several stages to provide the most compatible and convenient usage to the users. This project took our team eight weeks to complete.

2. OBJECTIVE

JANNS Laptop Standger is designed to make laptop users' lives more accessible than ever. There has been a global debate as to whether a tablet or iPad could replace a laptop as it is handier and causes less hassle. With our product innovation, we hope to put an end to the unending debate. In line with our vision and mission which are to make people's lives easier,

provide customers with the best service, and meet all customer needs. Therefore we believe that our JANNS Laptop Standger could make the impossible possible and allows us to take the life of laptop users to a whole new level.

3. NOVELTY & INVENTIVENESS

The use of wired charging has been replaced with wireless one as it is the most recent craze in the world of electronics. Here, JANNS Laptop Standger is designed to meet the needs of solving those problems faced by people who use such wired chargers by offering some differences through our design and specialities. The name “Standger” is actually a combination of charger and stand. The use of high-density plastic materials such as PC and ABS are useful for a lighter weight and reducing risk since less insulation is involved. Besides, advanced components of a high-efficiency chipset and an internal cooling fan provide the fastest possible wireless charge in its class. The state-of-the-art cooling system is being added in the process of creating this product, it somehow helps to minimise heat loss. In addition, this on-the-go function with a built-in charger and adjustable stand with several heights and angle options will benefit the consumers as it helps reduce the risk of repetitive stress injury caused by a forced downward perspective. Therefore, we ensure that JANNS Laptop Standger is of top-notch quality so that it will always bring benefit to others.

4. PRACTICALITY & USEFULNESS

JANNS Laptop Standger is expected to assist students, office workers and travellers who use their laptops everywhere. By using this product, the students can use laptops to do their assignments and attend their online classes everywhere without worrying about their laptop batteries. Furthermore, the office workers could do their jobs smoothly in cafes such as Starbucks and Coffee Bean since they can charge their laptops effortlessly everywhere as well as travellers such as businessmen and freelancers like Youtuber are more likely to bring their laptops during their journey. Thus, the consumer could bring this product everywhere since it is very adjustable and very light.

5. CONCLUSION

It is important to achieve our missions which are to make people's lives easier by offering greater mobility and convenience for them. Therefore, JANNS Laptop Standger really benefits the users as it serves many essential benefits in a small tool. It is lightweight, foldable and most importantly, a package of functionality.

REFERENCES

Industry - Country Industry Forecasts - Malaysia. (n.d.). MarketResearch.com. Retrieved June 7, 2022, from [https://www.marketresearch.com/Oxford-Economics-v3791/Country-Forecasts-Malaysi a-31144191/](https://www.marketresearch.com/Oxford-Economics-v3791/Country-Forecasts-Malaysi-a-31144191/)