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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.

Multifunction Effortless Pen

Nur Iffah Sahira Binti Abd Latiff¹, Nurin Asyarah Binti Ramli²,
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Abstract

We develop a product names effortless pen which comes with multifunction such as scanning, speaker, Bluetooth, wireless pen, and torch light with LED bulb. We proud to introduce its new product named Multifunctional pen or Effortless pen to presents the students and the community with a brand-new future of multifunctional pen hacks. We ought to see our design comes in three colours, white, gold, and silver as we want it to appear as minimalist and elegant for its users. The material is known as brass, which is a copper-zinc alloy. It is well-known for its strength, corrosion resistance, appealing appearance, and ease of formation. The LED colours of green, yellow, white, and blue are one of the distinguishing features. Furthermore, it has a USB port on the body for charging. On the other hand, our objectives in creating an effortless pen is to reduce the cost of expenses for students at higher levels, contribute to the development of technological advances in education, demonstrate the abilities of Malaysian students in the field of design, and to introduce products in the domestic and international markets. We confident that our product have potential to be commercialize not oly domestic but also export to other countries. Especially nowadays is everthing through online. This one of the factor that the dream can be true.

Keywords: multifunctional pen, USB port, Torch light, Bluetooth

1. INTRODUCTION

Which is the best pen for fast handwriting is a frequently asked question. Improving your handwriting speed has many advantages and using the right type of pen is certainly one of the most important factors in helping you to write faster. However, if you want to become a faster writer, you must also consider several other factors. Such as your handwriting style, posture, and the type of paper you're using. Pens are used to represent class, power, and influence. In short they represent the worth of someone, typically modern society conferring invisible title or ranks on people who own or use luxurious high quality of pens. Parker has been writing its way into homes, classrooms, and offices since 1988. Billion-person offices Parker is now synonymous with excellence, and the brand continues to thrive. Other than that, Mont Blanc pens, Cross Pens, Sheaffer Pens, Cello Pens, Reynolds, Camlin, Aurora, Papermate and Hero the most top brand of Pens. As a student we need pens, the smooth ball pens that make handwriting clear and less time for them to put much effort and time for make their notes. The issue is a lack of funds to purchase all of these brands. So this is some motivation to create a multifunction pen that is simple to use. We combine everything the student requires in a single pen.

2. OBJECTIVE

Our target market is focusing on teenagers especially college student who are independent in daily routine. The foremost reason is college student have to maintain a balance schedule between personal life and student life. Hence, our product is focusing on solving problems that arise and help them finish the daily tasks efficiently. Since multi-functional products are getting known in this country, we believe our unique creations are surely well-received by teenagers and supported by community. we have conduct a thorough research on students especially before making a final decision. Hence, we brainstormed 4 ideas to make sure our creations meet the needs and demands from the user. As we focus on problem-solving product, we choose the effortless pen as our main attraction after considering the risk and benefits. Moreover, we want to support the community by buying local products because this kind of stationary is limited in Malaysia and mostly sold from overseas. Not many local suppliers who produce this kind of multifunctional product and less affordable for students' budget. We hope that this creation inspires people and help make their life easier.

3. NOVELTY & INVENTIVENESS

Most of us do not expect our writing instruments to do more than just write. But this is want they can get if buy our “ multifunctional effort less pen” and we designs this product are capable of, we might just raise our expectations. Going far beyond making a mark, these inventions can capture colours from your environment, measure curves, write through water and record lectures. Our pen which comes with multifunction such as scanning, speaker, Bluetooth, wireless pen, and torch light with LED bulb. This concept is implemented in a much more realistic manner: with a tablet computer. The Chromopen features a built-in camera that can capture colours, making it easy for digital artists to create extremely realistic replicas of the scenes they're painting.

4. PRACTICALITY & USEFULNESS

Customers can use this product as a multifunction pen because it has been designed and modified. Business shows that the trend in writing instrument industry can grow into not only sophisticated style but also more purpose and function. This product can also be a product that has approximately the same total cost as other multifunction pen, but has more special features compared to other multifunction pen collections. will not only let you experience other sophistication than usual but also feel like a students who feels the different from using the new innovation of multifunction pen and this will raises self-esteem from this great product. The company also believes that the product is not only competitive locally but also globally, so the company will also introduce the product worldwide with the help of websites and networking websites.

5. CONCLUSION

If you are a student, then being able to write fast during lessons or at lectures allows you to spend more time listening to the teacher/lecturer and absorbing the information they are trying to impart. We have all being in a situation where someone is struggling to keep up with their note-taking and continually asking the teacher/lecturer to either pause or repeat. This means they are unable to concentrate on what is being taught. We hope that by develop this multifunction effort less pen, will help the student who has problem with pen when taking a note and to save your money we combine all the item that related with student needs.

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