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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.

Multipurpose Study Table

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Abstract

Pandemic Covid-19 impacted every sector and industry in Malaysia, including education, whereby most students have to continue their learning process online at home. Students had faced many problems with online learning at home during MCO (Movement Control Order), especially in terms of facilities/equipment. Most of the students did not have enough space to study conveniently due to too many things that needed to be used to perform a task. In the market, most of the tables, especially study tables, only display space to put a laptop and foldable. There is no essential features such as lamps provided when buying the study table. Therefore, innovation needs to be made to improve the existing study table sold in the market to fulfil the needs. Our product's name is "Multipurpose Study Table" and has six (6) enhanced elements (1) a chargeable folded desk lamp, which allows students to be more productive and focused on their studies even at night. In addition, our product is also equipped with (2) built-in Bluetooth speakers. Having a Bluetooth speaker attached to the table can help them enjoy their favourite songs while doing their job. (3) a mini drawer, whereby the student can have a compartment and space for any stationeries and small items to store. There will be a (4) cup or bottle holder, allowing students to safely set their drink on the table and not make them worry about accidentally spilling the water all over their things. It is also (5) foldable design, making it easier for the students to store and carry anyways. The multipurpose table also can be used for other activities, such as the make-up table, as it provides (6) a mini folded mirror inside the table. Our study table will make students feel more convenient in saving space and time, making it easy to carry and ergonomically.

Keywords: Multipurpose study table, chargeable folded desk lamp, Bluetooth speakers, mini drawer, cup or bottle holder, foldable design, mini folded mirror.

1. INTRODUCTION

The pandemic Covid-19 had a significant impact on every economy and industry in Malaysia, including education. Most students, from primary and secondary schools to college and university students, must learn from their homes using an online learning platform. However, some of the students faced problems, especially in terms of facilities and equipment, such as not enough space/place to study and do their homework within the comfortable condition. Also, a lack of entertainment will make the students lose focus and quickly burn out. Typically, students will use a table and chair or sit on the floor with a mini-study table where they will place all of the items needed for study or do their work. They need to have: sufficient lighting, especially at night, enough space to store their stationeries and small items, and entertainment and listening to music while doing their work to release their stress or maybe need a stable place to put their drinks while completing their work.

Therefore, these are the reasons why the multipurpose study table is being introduced.

2. OBJECTIVE

Our product's objective is to help students solve the problems they face, especially during the online distance learning process. The multipurpose study table helps them make their workspace more organised and efficient to accomplish their task, either studying or doing their homework effectively. Using this table, students can save space and its shape, making it easy to carry anywhere. Furthermore, students can enjoy their work while listening to music by using a Bluetooth speaker attached to the table and be more productive and focused on their study or work, especially at night, due to the sufficient lighting from the foldable lamp provided with the table. Besides, they can also safely put their drinks on the table because the unique hole was created to hold the glass/cup effectively so that the drinks could not spill and store all their stationeries and small items in the mini drawer.

3. NOVELTY & INVENTIVENESS

Most of the tables in the market did not offer all the elements offered in the "Multipurpose Study Table". This product has six (6) enhanced elements needed by the students: (1) a chargeable folded desk lamp, which allows students to be more productive and focused on their studies even at night.

(2) built-in Bluetooth speakers. Having a Bluetooth speaker attached to the table can help them enjoy their favourite songs while doing their job. In addition, our product is also equipped with (3) a mini drawer, whereby the student can have a compartment and space for any stationeries and small items to store. There will be a (4) cup or bottle holder, allowing students to safely set their drink on the table and not make them worry about accidentally spilling the water all over their things. It is also (5) foldable design, making it easier for the students to store and carry. The multipurpose table also can be used for other activities, such as the make-up table, as it provides (6) a mini folded mirror inside the table.

4. PRACTICALITY & USEFULNESS

"Multipurpose Study Table" is being developed with five (6) functions the students need, especially during MCO when the online learning is being introduced and practised. A study table with a chargeable folded desk lamp that can adjust light brightness from dim to bright will allow students to be more productive and focused on their studies even at night. Besides, having a Bluetooth speaker attached to the table can help them enjoy their favourite songs while doing their job. With a mini drawer designed on the table, the student can have a compartment and space for any stationeries and small items to store. The study table also comes with a design that attaches cup holders to the table, allowing students to safely set their drinks on the table and also will not make them worry about accidentally spilling the water all over their things. Drink holders are spacious enough to secure and hold items like a coffee cup, a canned beverage, or a water bottle. The multipurpose table can also be used for other activities, such as the make-up table, as it provides a mini folded mirror inside the table. The foldable design makes it easier for the students to store and carry. It is mainly dedicated to light and space that can help in boosting the student's concentration everywhere.

5. CONCLUSION

In conclusion, the Multipurpose Study Table has its own unique features that give students a pleasant and enjoyable studying environment. We hope that our continued efforts will resulting WudsCreative obtaining the attention deserves from our target customers and audience. We also hope that this product will help us to achieve our aims of assisting our customers in solving difficulties and competing with other companies that may accomplish the same thing.