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SYNOPSIS

Mersing district in Johor offers numerous gorgeous and magnificent islands to explore. However, because of a lack of international marketing and promotion, few people are aware of the beauty of the Mersing Islands. Nowadays, The trend of advertising the tourism sector has switched to the usage of virtual reality technology in step with the advancement of the digital world. Because the current trend among international tourists is to use VR technology to explore a destination before making a decision, we are taking the initiative to use the latest technology by creating a VR Tour Mersing Island hopping, to provide a real experience of exploring the beauty of the islands in Mersing and attracting their attention to visit Mersing.

Our first goal is to increase the economic activity of rural communities in Mersing by producing a simulation of touring Mersing's islands using virtual reality technology to pique the curiosity of tourists visiting the area. The second is to assist the government in implementing the policy of **rural development through the EK1 strategy 1.3** step 1, which is to implement innovative elements in tourism practices. The third is implementing **SDG 8 goal 8.9** by 2030 promoting sustainable tourism that creates jobs and promotes local culture and products as part of the united nation campaign.

Our product has been on the market and has met **Technology Readiness Level TRL 9**. Tourists from all over the world will be eager to visit Mersing because of the VR tour video simulation, which delivers an incredible exploration experience. As a result, our enterprise contributes to the local economy when tourists visit. This allows local entrepreneurs to create money while also providing various job opportunities for locals. We have also received support and encouragement from stakeholders and academics on this initiative, namely: IT Expert from UTM, Johor State Tourism Exco, and director of Motac Johor. We have also registered with the Intellectual Property of Malaysia, which is an agency responsible for the development and management of the intellectual property system in Malaysia.

Key word : VR, Virtual Reality, Digital Entrepreneur

1.0 Introduction

Maktab Rendah Sains MARA Mersing is a full-fledged residential school under the MRSM institution, which was managed by MARA. It was located in Mersing, Johor in 2001. The establishment of MRSM Mersing is in line with the nation's aspirations to provide access to education in secondary schools in science and technology to students who have high academic and intellectual abilities to develop their potentials.

2.0 Problem Statement

Mersing district in Johor offers numerous gorgeous and magnificent islands to explore. However, because of a lack of international marketing and promotion, few people are aware of the beauty of the Mersing Islands. Nowadays, the trend of advertising the tourism sector has switched to the usage of virtual reality technology in step with the advancement of the digital world.

According to data from Allied Market Research, In 2020, the global virtual tour market was estimated to be worth \$448.10 million, and it is expected to reach \$6.5 billion by 2030, growing at a CAGR of 31% between 2021 and 2030.

Because the current trend among international tourists is to use VR technology to explore a destination before making a decision, we are taking the initiative to use the latest technology by creating a VR Tour Mersing Island hopping, to provide a real experience of exploring the beauty of the islands in Mersing and attracting their attention to visit Mersing.

Nowadays, a virtual tour has grown popular among attraction managers, because it typically requires only little financial investment, provides visitors with a variety of tools to assist in learning, and enables attractions' intangible and tangible qualities to be communicated (El-Said & Aziz, 2022).

While in Malaysia, some industry players are already integrating virtual technologies into their businesses, such as through live virtual excursions with real tour guides and recorded segments for destinations such as Melaka and Kuala Lumpur (Goh, 2020). Besides, there are also some licensed tours that offer virtual experiences by exploring the city of Kuala Lumpur on foot (Klonfoot.com, 2020). Furthermore, with the virtual technologies available today, it is also not surprising to see a virtual safari experience, which is offered by the Bornean Sun Bear Conservation Centre in Sandakan, Sabah (Goh, 2020).

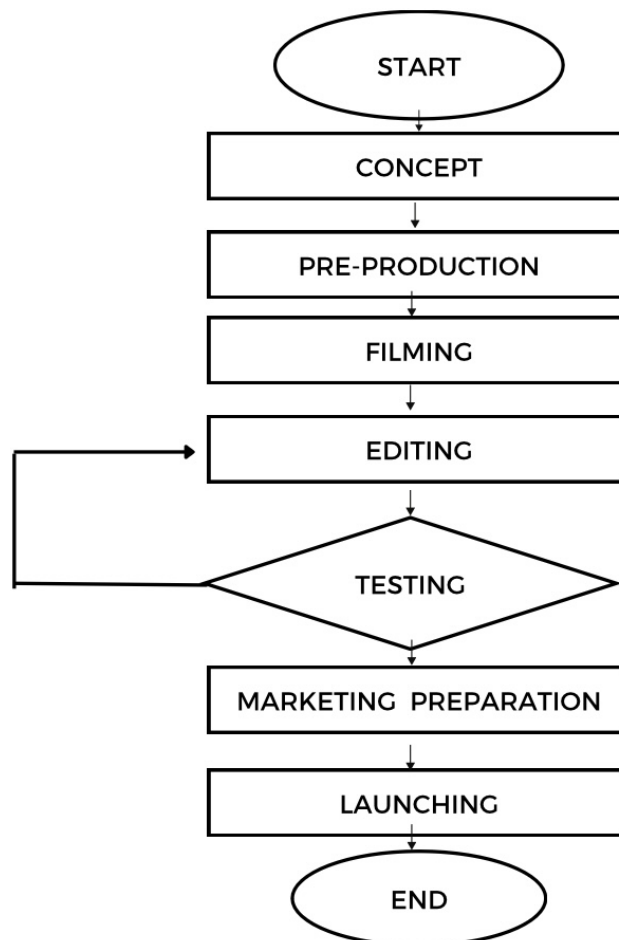
2.1 Objective

1. Our first goal is to increase the economic activity of rural communities in Mersing by producing a simulation of touring Mersing's islands using virtual reality technology to pique the curiosity of tourists visiting the area.
2. The second is to assist the government in implementing the policy of rural development through the EK1 strategy 1.3 step 1, which is to implement innovative elements in tourism practices.
3. The third is implementing SDG 8 goal 8.9 by 2030 promoting sustainable tourism that creates jobs and promotes local culture and products as part of the united nation campaign.

3.0 Innovation Made (Methodology)

A) Originality

Here's the methodology we used to build this project



We started with the production session, editing, testing, and marketing process. For the production session, we have determined the best point of interest in the five Mersing islands. Then, we use the insta x3 360 camera for video recording.

For editing process, first, we import the video to Insta360 apps for sorting and trimming. Next, we export the 360 video in Adob Premiere Pro for stitching, colour enhancement, insert voiceover, and logo. Then, we export the video on youtube as a VR video with privacy setting. Customers can purchase VR videos through our website www.mersingisland.com and it is recommended to watch using a VR set or smartphone with an OLED display screen.

B) Impact

This project has been in the market for 9 months, and we have got various customers from home and abroad. Tourists from all over the world will be eager to visit Mersing because of the VR tour video simulation, which delivers an incredible exploration experience. As a result, our enterprise contributes to the local economy when tourists visit. This allows boat entrepreneurs, chalet entrepreneurs, transportation service providers, food and retail entrepreneurs to create money while also providing various job opportunities for locals.

4.0 Innovation Status

Our product has been on the market and has met **Technology Readiness Level TRL 9**. Customers can purchase VR videos through our website www.mersingisland.com and it is recommended to watch using a VR set or smartphone with an OLED display screen.

5.0 Commercialization

A) Marketing Method

This project has been in the market for 9 months, and we have got various customers from home and abroad. We advertise the video in VR Community and our own forum and website. Interested customers can buy with only RM10 through our website, www.mersingisland.com . We also provide physical packages in collaboration with local entrepreneurs. Customers can also book physical packages through our website. All transactions is using our school cooperative account.

The chart below shows the number of visitors to our VR tour site www.mersingisland.com from September 2023 to May 2024. This shows our project has great potential in bringing tourists from European countries to the Mersing.



B) Sustainability

1. We are implementing SDG 8 goal 8.9 by 2030 promoting sustainable tourism that creates jobs and promotes local culture and products as part of the united nation campaign.
2. Our project makes tourists aware of the effects of marine pollution based on SDG 14.1 targets. We are running an awareness campaign for our customers related to SDG 14 : Life Below Water by showing a campaign video before the VR Tour starts

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6.0 Support Document



COPYRIGHT ACT 1987
COPYRIGHT (VOLUNTARY NOTIFICATION) REGULATIONS 2012
CERTIFICATE OF COPYRIGHT NOTIFICATION
[Subregulation 8(2)]

Notification Number : CRFM2024M03881
Title of Work : VR TOUR MERSING ISLAND HOPPING
Category of Work : FILM
Date of Notification : 05 JULY 2024
Date of Creation : 01 JULY 2023
Date of First Published : 16 JULY 2023

This is to certify, under the Copyright Act 1987 [Act 332] and the Copyright (Voluntary Notification) Regulations 2012 that the copyrighted work bearing the Notification No. above for the applicant **MAKTAB RENDAH SAINS MARA MERSING (JMA4002)** as the **OWNER** and **MUSTAFA OMAR BIN AHMAD (841219065113)**, **ABDUL RAHIM BIN ABDULLAH (790528105337)**, **KARTIKA BINTI FIRMAN (910303125904)** as the **AUTHORS** have been recorded in the Register of Copyright, in accordance with section 26B of the Copyright Act 1987 [Act 332].

KAMAL BIN KORMIN
CONTROLLER OF COPYRIGHT
MALAYSIA



(Agency under the Ministry of Domestic Trade and Cost of Living)



DASAR PEMBANGUNAN LUAR BANDAR

- Jadikan luar bandar menarik & kondusif sebagai tempat tinggal, bekerja & pelaburan, di samping merapatkan jurang ketidakseimbangan pembangunan antara penduduk bandar, luar bandar & wilayah
- Kerangka hala tuju pembangunan luar bandar ke arah menjadikan Malaysia negara maju menjelang 2025 & berpendapatan tinggi
- Menggariskan 10 teras, 33 pernyataan dasar & 88 strategi yang akan dilaksanakan sehingga tahun 2030

10 TERAS

1 EKONOMI



Ekonomi berdaya saing & mampan

2 KEUSAHAWANAN



Keusahawanan pemacu pembangunan ekonomi

3 MODAL INSAN



Modal insan berkualiti

4 PRASARANA



Prasarana lengkap & canggih

5 BELIA



Keunggulan generasi belia luar bandar

6 WANITA



Wanita luar bandar yang progresif

7 KEHIDUPAN SEJAHTERA



Kehidupan luar bandar yang sejahtera

8 SISTEM PENYAMPAIAN



Sistem penyampaian & tadbir urus berkesan

9 BIODIVERSITI



Biodiversiti & alam sekitar mampan

10 PEMBANGUNAN



Perumahan, pembangunan wilayah & penempatan desa bersepadu

Sumber : Kementerian Pembangunan Luar Bandar

Infografik Bernama



DASAR PEMBANGUNAN LUAR BANDAR



LUAR BANDAR SEJAHTERA

Notification of payment received



Peter Schlatter via PayPal

To KOPERASI MAKTAB RENDAH SAINS MARA...

Sep 10 at 12:58 AM

www.paypal.com

Hello, KOPERASI MAKTAB RENDAH SAINS MARA BERHAD



**You received a payment
of RM320.00 MYR from
Peter Schlatter
(schlatter@email.ch)**

Thanks for using PayPal. You can now ship any items.
To see all the transaction details, log in to your PayPal
account.

It may take a few moments for this transaction to
appear in your account.

Seller Protection - Eligible



| Transaction ID 6FS31622FD9491621 | Transaction date September 10, 2023 12:58:36 AM GMT+8 | | | | | | | | | | | | | | | | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------|--------------|-----|--------|------------------------------------------|--------------|---|--------------|-----------------|--|--|--------------|--------------|--|--|--------------|----------------|--|--|--------------|
| Buyer Peter Schlatter schlatter@email.ch | Instructions to merchant The buyer hasn't entered any instructions. | | | | | | | | | | | | | | | | | | | | |
| Invoice ID fddccf-1396 | | | | | | | | | | | | | | | | | | | | | |
| Shipping address Peter Schlatter Neuhofstrasse 13 8708 Männedorf Schweiz | Shipping details You haven't added any shipping details. | | | | | | | | | | | | | | | | | | | | |
| <table><thead><tr><th>Description</th><th>Unit price</th><th>Qty</th><th>Amount</th></tr></thead><tbody><tr><td>Physical Mersing Island Hopping</td><td>RM320.00 MYR</td><td>1</td><td>RM320.00 MYR</td></tr><tr><td colspan="2">Subtotal</td><td></td><td>RM320.00 MYR</td></tr><tr><td colspan="2">Total</td><td></td><td>RM320.00 MYR</td></tr><tr><td colspan="2">Payment</td><td></td><td>RM320.00 MYR</td></tr></tbody></table> | | Description | Unit price | Qty | Amount | Physical Mersing Island Hopping | RM320.00 MYR | 1 | RM320.00 MYR | Subtotal | | | RM320.00 MYR | Total | | | RM320.00 MYR | Payment | | | RM320.00 MYR |
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| Subtotal | | | RM320.00 MYR | | | | | | | | | | | | | | | | | | |
| Total | | | RM320.00 MYR | | | | | | | | | | | | | | | | | | |
| Payment | | | RM320.00 MYR | | | | | | | | | | | | | | | | | | |
| Payment sent to helpkopmers@aol.com | | | | | | | | | | | | | | | | | | | | | |







SUSTAINABLE DEVELOPMENT GOALS

GOAL 8
DECENT
WORK
AND
ECONOMIC
GROWTH



8-9
Promote Beneficial
and Sustainable
Tourism

By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.

ACHIEVEMENT
1st PRIZE iMARATeCH 2025 (STAFF CATEGORY)





Achievement

| TARIKH | NAMA | PENGANJUR | PERINGKAT | PENCAPAIAN |
|------------|-----------------------------------------------------------------|--------------------------------------------|--------------|------------------------------|
| 12.6.2024 | MELAKA INTERNATIONAL INTELLECTUAL EXPOSITION 2024 | KERAJAAN NEGERI MELAKA & UITM | ANTARABANGSA | TEMPAT PERTAMA ANUGERAH KHAS |
| 12.6.2024 | MELAKA INTERNATIONAL INTELLECTUAL EXPOSITION 2023 | KERAJAAN NEGERI MELAKA & UITM | ANTARABANGSA | GOLD AWARD |
| 30.5.2024 | INTERNATIONAL INVENTION, INNOVATION AND DESIGN COMPETITION 2024 | UITM CAW. KELANTAN | ANTARABANGSA | GOLD AWARD |
| 27.6.2024 | INTERNATIONAL STEM INNOVATION COMPETITION 2024 | WAWASAN OPEN UNIVERSITY | ANTARABANGSA | GOLD AWARD |
| 20.5.2024 | NATIONAL INNOVATION & CREATIVITY COMPETITION 2024 | KEMENTERIAN PENDIDIKAN TINGGI (POLITEKNIK) | KEBANGSAAN | GOLD AWARD |
| 15.12.2023 | INVENTION, INNOVATION & DESIGN EXPOSITION 2023 | UITM CAW. SELANGOR | KEBANGSAAN | GOLD AWARD |
| 15.11.2023 | MALAYSIA GRAND INVENTION EXPO MAGIEX 2023 | UITM. CAW. KELANTAN & NUSANTARA RESEARCH | ANTARABANGSA | GOLD AWARD |



