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E-PROCEEDINGS

INTERNATIONAL TINKER INNOVATION & ENTREPRENEURSHIP CHALLENGE (i-TIEC 2025)

"Fostering a Culture of Innovation and Entrepreneurial Excellence"



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23 January 2025
PTDI, UiTM Cawangan Johor
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Electrical Engineering Studies, College of Engineering
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PREFACE

It is with great pleasure that we present the e-proceedings of International Tinker Innovation & Entrepreneurship Challenge (i-TIEC 2025), which compiles the extended abstracts submitted to the International Tinker Innovation & Entrepreneurship Challenge (i-TIEC 2025), held on 23 January 2025 at **PTDI, Universiti Teknologi MARA (UiTM) Cawangan Johor, Kampus Pasir Gudang**. This publication serves as a valuable resource, showcasing the intellectual contributions on the invention and innovation among students, academics, researchers, and professionals.

The International Tinker Innovation & Entrepreneurship Challenge (i-TIEC 2025), organized under the theme "Fostering a Culture of Innovation and Entrepreneurial Excellence," is designed to inspire participants at various academic levels, from secondary students to higher education students and professionals. The competition emphasizes both innovation and entrepreneurship, encouraging the development of product prototypes that address real-world problems and have clear commercialization potential. By focusing on technological and social innovations, i-TIEC 2025 highlights the importance of turning creative ideas into viable, market-ready solutions that can benefit users and society. The extended abstracts in this e-proceedings book showcase the diverse perspectives and depth of research presented during the event, reflecting the strong entrepreneurial element at its core.

We extend our sincere gratitude to the contributors for their dedication in sharing their innovation and the organizing committee for their hard work in ensuring the success of the event and this publication. We also appreciate the support of our collaborators; Mass Rapid Transit Corporation Sdn. Bhd. (MRT Corp), Universitas Labuhanbatu, Indonesia (ULB), Universitas Riau Kepulauan, Indonesia (UNRIKA) and IEEE Young Professionals Malaysia, whose contributions have been instrumental in making this event and publication possible.

We hope that this e-proceedings book will serve as a valuable reference for researchers, educators, and practitioners, inspiring further studies and collaborations in both innovation and entrepreneurship. May the knowledge shared here continue to spark new ideas and market-ready solutions, advancing our collective expertise and fostering the growth of entrepreneurial ventures.

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A-SS053: THE ENLIGHTENMENT EXPERIENCE: INTERPRETATION PLAN DEVELOPMENT FOR TELUK INTAN HERITAGE GETAWAY

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ABSTRACT

This project, the interpretation plan for a heritage getaway in Teluk Intan, Perak, focused on crafting the blueprint for a heritage town by highlighting its historical and cultural significance. The plan showcases Teluk Intan's unique heritage, including its diverse architecture, traditions and natural wonders. The initiative was inspired by the lack of appreciation towards Teluk Intan as a heritage destination in Malaysia as well as the rapid pace of urbanization that brings threats towards the preservation of Teluk Intan's historical buildings, cultural traditions and intangible heritage. This project innovatively documents, interprets and promotes these elements, thus integrating with local businesses, cultural events and natural attractions to stimulate the local economy. The plan is built around the main theme of the enlightenment experience, portraying Teluk Intan as a symbolic portal connecting tourists to its past, present and future. This project's data collection involved secondary and primary data collection, including inventory for historical and cultural elements using the Field Maps application, focus group interviews and survey questionnaires. Seven thematic zones have been formulated to provide the unique experience of Teluk Intan as a heritage gateway aimed to position Teluk Intan as a premier heritage destination, promoting sustainable tourism and economic development.

Keywords: Interpretation plan, Heritage trail, Teluk Intan, Tourism planning

1. Product Description

This project crafted a product that is a comprehensive interpretation plan for Teluk Intan, Perak themed "*The Enlightenment for Heritage Getaway*" aimed in promoting the uniqueness of the town as a heritage destination in Malaysia. The plan crafting seven thematic zones – "*Timeless Chronicles*", "*Melody of Cultures*", "*Whispering Heritage Zone*", "*Unlimited Uniqueness*", "*Fusion Lane*", "*Make Way Namaste*" and "*Lung of Town*" – the plan highlights Teluk Intan's rich cultural diversity, historical significance and natural attractions. Each zone features distinct checkpoints such as historical landmarks, religious institution, local markets, food famous spot and eco-tourism attractions, emphasizing the town's multicultural heritage, culinary richness and unique identity. The interpretation plan provides a unique experience of heritage significance among tourists by integrating learning, engagement and emotional connection, while promoting tourism, empowering local communities, preserving heritage and driving local economic growth.

2. Interpretive Master Plan Proposal

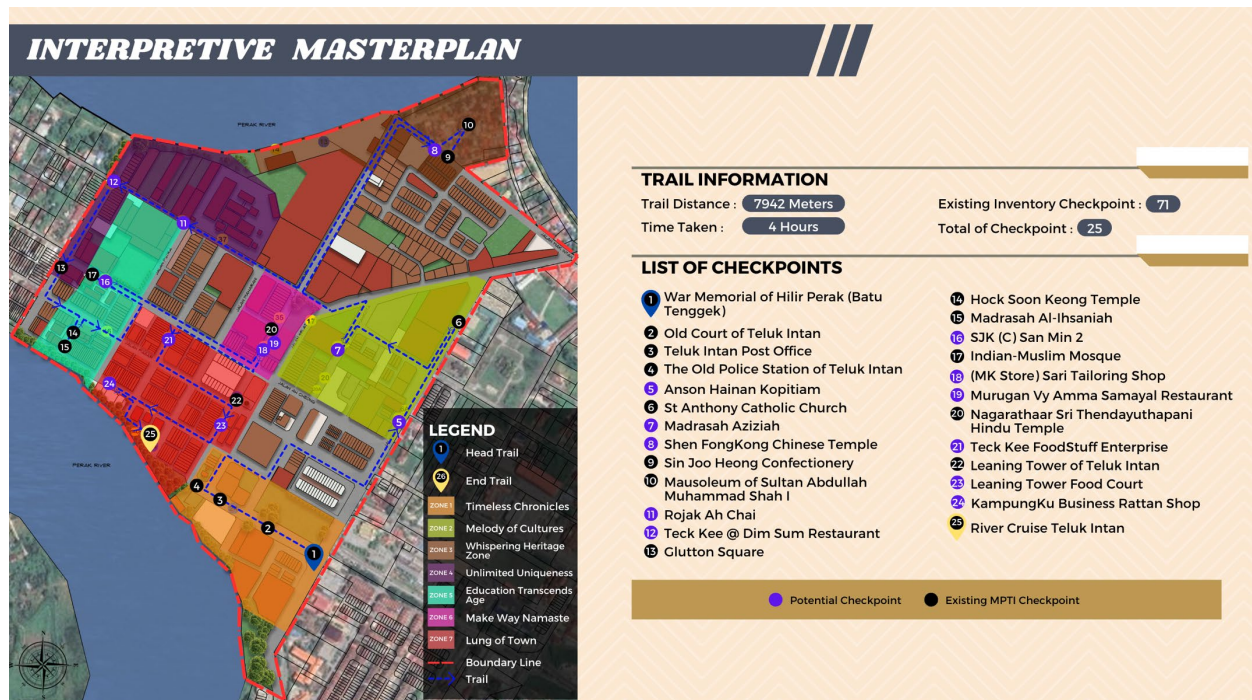


Figure 1. Interpretive master plan proposal for Teluk Intan

3. Novelty and uniqueness

The blueprint for the interpretation plan of Teluk Intan showcases uniqueness through its holistic, zone-based approach, consistently integrating historical, cultural, and natural elements to enrich the historical experience for tourists. With the theme *"The Enlightenment for Heritage Gateway,"* the plan innovatively divides several checkpoints of distinct significance into seven thematic zones, each identified by a unique sub-theme and curated checkpoints that blend tangible landmarks with intangible heritage, such as traditions, festivals, and cuisines. Unlike conventional heritage projects, this plan emphasizes emotional connection, active engagement, and learning objectives, ensuring that tourists experience the rich legacy of Teluk Intan's historical uniqueness. While promoting the inclusivity and sustainability of eco-tourism of Teluk Intan, this plan highlights the town's multicultural harmony, natural wonders and local beliefs.

4. Benefit to mankind

The interpretation plan for Teluk Intan benefits mankind by preserving and promoting cultural heritage, fostering a deeper understanding and appreciation of history, and encouraging cultural exchanges. By portraying Teluk Intan's multicultural harmony and historical significance, the plan aimed to educate tourists, fosters emotional connection and inspires respect for cultural diversity. Additionally, it empowers local communities through

economic opportunities, supporting local businesses and creating jobs in tourism and hospitality sector. The plan is hoped to strengthen the identity of the local community by focusing on the town's unique identity. As a replicable model of interpretation plan, this project contributes to the global effort in preserving heritage while promoting economic growth, education and sustainable development, ensuring that future generation inherit a rich and diverse cultural legacy.

5. Innovation and Entrepreneurial Impact

This project promotes innovation by introducing a structured, thematic interpretation plan that gives new insights of heritage enlightenment, particularly for Teluk Intan. By integrating storytelling and interpretive media, this project revitalized traditional tourism approaches of the town. The seven thematic zones formulated in the plan encourage the local community to view their cultural and historical assets as marketable resources, inspiring creative ways to attract and engage tourists. Additionally, this project fosters a culture of entrepreneurship by creating opportunities for locals to develop businesses around the tourism ecosystem. For example, food vendors can offer traditional dishes aligned with the zones, tour operators can design unique experience tied to the sub-themes and local artisans can sell crafts inspired by the heritage themes. Furthermore, festival and cultural events, such as those in *"Make Way Namaste"* can drive seasonal tourism and increase revenue. By empowering communities to take ownership of their heritage, the project encourages innovative and sustainable entrepreneurship.

6. Potential commercialization

The interpretation plan for Teluk Intan has strong commercialization potential by transforming the town into a sought-after heritage tourism destination. The thematic zones and curated checkpoints create opportunities for guided tours, interactive exhibits, and digital storytelling platforms that can be monetized. Local businesses, such as souvenir shops, restaurants and craft vendors can align their products with the zones' sub-themes, increasing their market appeal. Natural wonders such as bird-watching tours and river cruises can attract diverse tourists to experience the natural attractions of the plan. The plan also supports partnerships with local authorities, travel agencies and hospitality providers to develop tourism packages. By integrating cultural preservation with tourism and business opportunities, the project ensures sustainable economic growth while promoting Teluk Intan's heritage uniqueness.

7. Acknowledgment

We would like to express our deepest gratitude to Mr. Muhammad Sharil Hamir from the Teluk Intan Municipal Council for his invaluable briefing and guidance on the tourism potential of Teluk Intan. Our heartfelt thanks also extend to the other staff members of the local authority, as well as the respondents, including the members of the local community, representatives from non-governmental organizations, and business owners from Teluk Intan, for their cooperation and support during the data collection process. We also profoundly thank the College of Built Environment, Universiti Teknologi MARA (UiTM) Shah Alam, for their approval, guidance and financial assistance, which played a crucial role in

successfully completing this project. Your contributions have been instrumental in realizing the objectives of this interpretation plan, and we deeply appreciate your unwavering support and collaboration.

8. Authors' Biography



Amalin 'Aisyah Zamri is a student of Parks and Amenity Management in UiTM Shah Alam, currently in her 5th semester. With a strong academic record, she demonstrates a keen interest in leveraging technology, including GIS software and AutoCAD, for spatial and cultural projects. Known for her positive attitude, teamwork and dedication to learning, Amalin actively participated in the interpretation plan project for Teluk Intan, contributing her technical expertise and creative problem-solving skills.



Nik Nur Amirah Izzati Nik Hazri is a Degree student in Parks and Amenity Management at UiTM Shah Alam. Known for her creativity and dedication, she excels in design tools such as Photoshop, SketchUp, and AutoCAD. Passionate about learning and teamwork, Amirah brings a detail-oriented approach to projects. She actively contributes to events and exhibitions, demonstrating her commitment to both academic excellence and community engagement.



Sri Rahayu Mohd Sa'ad is a Senior Lecturer at the Centre of Studies for Parks and Amenity Management, College of Built Environment, UiTM Shah Alam. With expertise in urban park management, design, and sustainability, she has contributed extensively to research on facilities management and conservation strategies. She has over a decade of experience in academia and community engagement. She has been recognized for her impactful contributions to urban environmental planning and sustainable tourism development.



Nurul Akmaniza Mohd Nasir is a lecturer at College of Built Environment, UiTM Shah Alam. Her academic work is closely tied to her commitment to sustainable development, especially in the context of the built environment. She has been actively involved in environmental projects such as evaluation study of ecosystem services in for green space planning and the development of management plans for recreational forests, focusing on identifying resource inventories and crafting sustainable tourism activities that balance ecological conservation with visitor engagement.